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July 30, 2018

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, D.C. 20426

*Re: PJM Interconnection, L.L.C., Docket No. EL05-121-009 and ER18-2102-000  
eTariff Compliance Filing for Schedule 12 and Schedule 12-Appendices*

Dear Secretary Bose:

On June 15, 2016, the Settling Parties<sup>1</sup> filed Settlement Agreement and Offer of Settlement (“Settlement”)<sup>2</sup> in the captioned matter for rates to become effective January 1, 2016. In the Order on Contested Settlement,<sup>3</sup> the Federal Energy Regulatory Commission (“Commission”) approved the Settlement and directed PJM Interconnection, L.L.C. (“PJM”) to

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<sup>1</sup> The “Settling Parties” are: American Electric Power Service Corporation, on behalf of its operating companies; Baltimore Gas and Electric Company, an Exelon Company; Blue Ridge Power Agency, Inc.; The Dayton Power and Light Company; Delaware Municipal Electric Corporation, Inc.; Duke Energy Business Services, LLC on behalf of Duke Energy Ohio, Inc. and Duke Energy Kentucky, Inc.; Duquesne Light Company; East Kentucky Power Cooperative, Inc.; Exelon Corporation as agent for Commonwealth Edison Company and PECO Energy Company; FirstEnergy Utilities On behalf of affiliates American Transmission Systems, Incorporated, The Cleveland Electric Illuminating Company, Jersey Central Power & Light Company, Metropolitan Edison Company, Ohio Edison Company, Monongahela Power Company, Pennsylvania Electric Company, Pennsylvania Power Company, The Potomac Edison Company, Toledo Edison Company, and West Penn Power Company; Illinois Commerce Commission; Indiana Utility Regulatory Commission; Michigan Public Service Commission; Pennsylvania Public Utility Commission; Pepco Holdings, LLC, an Exelon Company, and Potomac Electric Power Company, Delmarva Power & Light Company and Atlantic City Electric Company; PJM Interconnection, L.L.C.; PPL Electric Utilities Corporation; Public Service Commission of West Virginia; Public Utilities Commission of Ohio; and UGI Utilities, Inc. Additionally, the following parties have agreed to be listed in the Settlement as “NonOpposing Parties”: Consolidated Edison Company of New York, Inc.; Delaware Public Service Commission; Maryland Public Service Commission; New Jersey Board of Public Utilities; Old Dominion Electric Cooperative; PSEG Energy Resources & Trade LLC; Public Power Association of New Jersey; Public Service Electric and Gas Company; Public Service Commission of the District of Columbia; Rockland Electric Company; Virginia Electric and Power Company, DBA Dominion Virginia Power; and the Virginia State Corporation Commission.

<sup>2</sup> *PJM Interconnection, L.L.C.*, Offer of Settlement, Docket No. EL05-121-009 (June 15, 2016) (“Settlement”).

<sup>3</sup> *PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,168 (May 31, 2018) (“May 31 Order”).

submit the associated Tariff amendments by way of compliance eTariff records consistent with the *pro forma* tariff records included with the Settlement.<sup>4</sup>

Accordingly, in compliance with the May 31 Order, and pursuant to section 205 of the Federal Power Act<sup>5</sup> and Part 35 of the Commission's rules and regulations,<sup>6</sup> PJM submits amendments to the PJM Open Access Transmission Tariff ("Tariff") to add in eTariff format the *pro forma* tariff records to include a new Schedule 12-C, including Appendices A through C, as approved under the Settlement.<sup>7</sup> In addition, consistent with section 2.2(c) of the Settlement, PJM submits amendments to Tariff, Schedule 12-Appendix to amend cost responsibility assignments for Covered Transmission Enhancements as described in detail below. PJM requests that these proposed amendments become effective January 1, 2016, as directed by the Commission in its May 31 Order.

## **I. DESCRIPTION OF FILING**

### ***A. Background***

This filing follows years of litigation before the Commission under multiple dockets,<sup>8</sup> two 7<sup>th</sup> Circuit Remand Orders<sup>9</sup> and an established FERC hearing and settlement judge

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<sup>4</sup> In the May 31 Order, the Commission directed PJM to submit a compliance filing within 30 days of the Order or June 30, 2018. Pursuant to a motion for extension of time filed by PJM, the Commission extended the date to comply an additional 30 days to July 30, 2018. See *PJM Interconnection, L.L.C.*, Notice Granting Request for Extension of Time, Docket No. EL05-121-009 (June 13, 2018).

<sup>5</sup> 16 U.S.C. § 824d.

<sup>6</sup> 18 C.F.R. Part 35 (2018).

<sup>7</sup> Due to e-Tariff restrictions, the proposed revisions to the PJM Tariff for Schedule 12-C Appendix B and Schedule 12-C Appendix C will be filed under separate cover using the same transmittal letter with the specified attachments corresponding to each filing because the version effective January 1, 2018 could not be submitted in the same filing in which the tariff record was initial created.

<sup>8</sup> May 31 Order, PP 3 - 7.

<sup>9</sup> See *Illinois Commerce Comm'n, et al. v. FERC*, 756 F.3d 556 (7<sup>th</sup> Cir. 2014); see also *Illinois Commerce Comm'n, et al. v. FERC*, 576 F.3d 470 (7<sup>th</sup> Cir. 2009), *reh'g and reh'g en banc denied* (Oct. 20, 2009).

proceeding<sup>10</sup> to determine the appropriate cost allocation for new transmission facilities that operate at or above 500 kV (“Regional Facilities”)<sup>11</sup> and Necessary Lower Voltage Facilities<sup>12</sup> that PJM planned and approved before February 1, 2013, whose costs were allocated in accordance with the 100 percent load-ratio share method established in Opinion No. 494.<sup>13</sup> Following seven settlement conferences convened by settlement judge Steven L. Sterner and attended by interested parties both in person and via teleconference, the Settling Parties submitted the Settlement on June 15, 2016 in Docket No. EL05-121-009 to take effect on the date the Commission approved the Settlement, i.e., May 31, 2018.

***B. Description of New Schedule 12-C and Appendices to Implement the Settlement***

The May 31 Order approved the *pro forma* tariff records included in the Settlement to add a new Schedule 12-C and three (3) appendices: (i) Appendix A (List of Covered Transmission Enhancements), (ii) Appendix B (Allocations for Canceled Projects) and (iii) Appendix C (Transmission Enhancement Charge (TEC) Adjustments – Monthly). Schedule 12-C sets forth the assignment of cost responsibility for Required Transmission Enhancements<sup>14</sup> listed in Schedule 12-C Appendix A, as of January 1, 2016. Each Required Transmission Enhancement listed in Schedule 12-C Appendix A, is referred to as a “Covered Transmission

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<sup>10</sup> *PJM Interconnection, L.L.C.*, 149 FERC ¶ 61,233 (2014).

<sup>11</sup> Prior to 2013, Regional Facilities were defined to mean new transmission enhancements and expansions that will operate at or above 500 kV and are included in the upgrade to the RTEP approved by the PJM Board of Managers (“PJM Board”). PJM Tariff, Schedule 12 § (b)(i) (2010).

<sup>12</sup> Necessary Lower Voltage Facilities are defined as Required Transmission Enhancements included in the Regional Transmission Expansion Plan (“RTEP”) that are lower voltage facilities that must be constructed or reinforced to support new Regional Facilities.

<sup>13</sup> *PJM Interconnection, L.L.C.*, Opinion No. 494, 119 FERC ¶ 61,063 (2007), *order on reh’g*, Opinion No. 494-A, 122 FERC ¶61,082 (2008).

<sup>14</sup> “Required Transmission Enhancements” is defined in the Tariff in pertinent part to mean “enhancements and expansions of the transmission system that an [RTEP] developed pursuant to Schedule 6 of the Operating Agreement . . . .” See PJM Tariff, OATT Definitions – R-S.

Enhancement.” Covered Transmission Enhancements included in this Settlement that were canceled or abandoned before entering service are identified in Schedule 12-C Appendix A as a “Canceled Project.”<sup>15</sup> Schedule 12-C contains different methods for recovery of costs incurred for Covered Transmission Enhancements.

*1. Description of Proposed Amendments to Schedule 12-Appendix for the Going Forward Period Commencing January 1, 2016*

In the May 31 Order, the Commission accepted under Schedule 12-C for the going-forward period (the period commencing January 1, 2016 onward) modifications to the cost allocation methodology for Covered Transmission Enhancements included in Tariff, Schedule 12-Appendix. Therefore, pursuant to the Settlement, section 2.2(c) (Current Recovery Charge), PJM is required to modify Schedule 12-Appendix to assign cost responsibility to Responsible Customers<sup>16</sup> for each Covered Transmission Enhancement listed in Schedule 12-C Appendix A, based on the agreed-upon hybrid methodology in which: (i) 50 percent of the cost responsibility shall be assigned to Responsible Customers using the annual load-ratio share method;<sup>17</sup> and (ii) 50 percent of the cost responsibility shall be assigned to Responsible Customers using: (A) for MAPP and PATH projects identified as Canceled Projects Schedule 12-C Appendix A, the cost assignments are set forth in Schedule 12-C Appendix B;<sup>18</sup>

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<sup>15</sup> The Allocations for those Canceled Projects are detailed in Schedule 12-C Appendix B. In addition, Schedule 12-Appendix contains allocations for Regional Facilities that are not listed in Schedule 12-C Appendix A and not revised in this filing as revenues were not collected for those canceled projects and those baseline upgrades will be removed from Schedule 12-Appendix in a subsequent clean-up filing.

<sup>16</sup> “Responsible Customers” are defined to mean “customers using Point-to-Point Transmission Service and/or Network Integration Transmission Service and Merchant Transmission Facility owners that will be subject to each such Transmission Enhancement Charge. See Tariff, Schedule 12, § (b)(viii).

<sup>17</sup> Tariff, Schedule 12 § (b)(i)(A)(1).

<sup>18</sup> The Branchburg to Roseland to Hudson (“BRH”) project was not included in Schedule 12-C Appendix B because there were no abandonment costs after January 1, 2016.



or (B) for all other Covered Transmission Enhancements listed in Schedule 12-C Appendix A, the current effective solution-based DFAX method.<sup>19</sup>

In addition, the Tariff sheets reflect additional changes to address: (i) the 2017 and 2018 annual updates provided for under the Tariff for load-ratio share<sup>20</sup> and solution-based DFAX, where applicable;<sup>21</sup> (ii) changes in cost allocations to Responsible Customers in 2017 due to the integration of MAIT,<sup>22</sup> effective February 1, 2017; (iii) the elimination of cost responsibility to Consolidated Edison Company of New York, Inc. (“Con Edison”) due to termination of its long-term firm point-to-point transmission service agreements, effective May 1, 2017;<sup>23</sup> and (iv) changes in cost allocations to remaining Responsible Customers in 2018 due to termination of allocations to two Merchant Transmission Facilities, Linden VFT, LLC (“Linden”) and Hudson Transmission Partners, LLC (“HTP”), as a result of relinquishment of their Firm Transmission Withdrawal Rights, effective January 1, 2018.<sup>24</sup>

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<sup>19</sup> Tariff, Schedule 12 § (b)(i)(A)(a).

<sup>20</sup> Tariff, Schedule 12 § (b)(i)(A).

<sup>21</sup> Tariff, Schedule 12 § (b)(iii)(H)(2).

<sup>22</sup> *PJM Interconnection, L.L.C.*, Amendments to PJM agreements and tariffs for integration of MAIT, Docket No. ER17-214-000 (Oct. 28, 2016) (this filing affected the Metropolitan Edison Company’s and Pennsylvania Electric Company’s eTariff records only).

<sup>23</sup> *PJM Interconnection, L.L.C.*, 159 FERC ¶ 62,310 (June 20, 2017).

<sup>24</sup> *PJM Interconnection, L.L.C.*, 162 FERC ¶ 61,197 (Mar. 5, 2018) (accepting annual updates including elimination of cost allocations to Linden and HTP, effective January 1, 2018); *see also PJM Interconnection, L.L.C.*, Compliance Filing, Docket No. ER18-680-000 (Jan. 19, 2018) (filing in compliance with the December 15, 2017 orders issued in Docket Nos. EL17-84-000 and EL17-90-000 to eliminate cost responsibility to Linden and HTP as a result of relinquishing their Firm Transmission Withdrawal Rights effective January 1, 2018). Based on requests for rehearing granted by the Commission in Docket Nos. ER18-579-000 and the outstanding issues in Docket No. ER18-680, the Commission issued an order on July 19, 2018 setting for settlement proceedings all Commission dockets specific to eliminating cost allocations to Hudson and Linden effective January 1, 2018 as a result of their relinquishment of their Firm Transmission Withdrawal Rights. *See Linden VFT, LLC v. PJM Interconnection, L.L.C.*, 164 FERC ¶ 61,034 (July 19, 2018).

2. *Description of Covered Transmission Enhancement Charge Adjustments for the Historical Period Prior to January 1, 2016*

For the historical period (the period prior to January 1, 2016) during which the costs of the Covered Transmission Enhancements were recovered using the 100 percent load-ratio share method approved in Opinion No. 494,<sup>25</sup> Schedule 12-C Appendix C provides for Covered Transmission Enhancement Charge Adjustments to the billing for Covered Transmission Enhancements through a schedule of credits or payments from Responsible Customers based on a negotiated schedule. Specifically, effective as of January 1, 2016 and continuing through December 31, 2025, in addition to the Current Recovery Charge detailed in B(1) above, PJM shall collect from or credit to Responsible Customers the Transmission Enhancement Charge Adjustments set forth in Appendix 12-C for each Zone and each Merchant Transmission Facility.

C. *Adjustments to Transmission Enhancement Charge Adjustments*

The Settlement provides that the Transmission Enhancement Charge Adjustments set forth in Schedule 12-C Appendix C may be adjusted only under two circumstances as detailed in section 2.2(e) of the Settlement. Consistent with that provision, PJM proposes to make the following adjustments to the Transmission Enhancement Charge Adjustments.

1. *Consistent with Section 2.2(e)(2) of the Settlement, PJM has Adjusted the Transmission Enhancement Charge Adjustments in Schedule 12-C Appendix C as a Result of Linden's and HTP's Relinquishment of their Firm Transmission Withdrawal Rights, Effective January 1, 2018.*

Section 2.2(e)(2) of the Settlement provides, *inter alia*, that if a Merchant Transmission Facility is no longer subject to Transmission Enhancements Charges under the Tariff during the period in which Transmission Enhancement Charge Adjustments are collected, the Responsible Customer shall not be subject to such Transmission Enhancement Charges during the portion of

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<sup>25</sup> See *supra*, at 3, n. 12.

that period and payment from or credits to such Responsible Customer(s) shall cease. Section 2.2(e)(2) of the Settlement further provides that PJM shall adjust the Transmission Enhancement Charge Adjustments payable by and credited to other Responsible Customers on a *pro rata* basis so that if, for example, the Responsible Customers were required to make payments, then the payment obligation associated with such Responsible Customers will be allocated *pro rata* among all remaining Zones and Merchant Transmission Facilities in which Responsible Customers remain subject to Transmission Enhancement Charges and have payment obligations under this Schedule 12-C Appendix C.

Merchant Transmission Facilities, Linden (identified as East Coast Power) and HTP, were assigned cost responsibility for Transmission Enhancement Charge Adjustments under Schedule 12-C Appendix C. Given that Linden and HTP relinquished their Firm Transmission Withdrawal Rights, effective January 1, 2018, PJM adjusted, on a *pro rata* basis, allocations, commencing January 1, 2018, to all remaining Zones and Merchant Transmission having payment obligations under Schedule 12-C Appendix C.

2. *No Adjustments to Transmission Enhancement Charge Adjustments are Required at this time for the Canceled PATH Project.*

PJM has determined that no adjustment to the Transmission Enhancement Charge Adjustments is required under section 2.2(e)(1) of the Settlement, as implemented by section 4(c)(i)(1) of Schedule 12-C. That provision provides that if the Commission issues a final decision in Docket No. ER12-2708-003 “that is no longer subject to judicial review,” relating to the recovery of costs by the owners of the canceled Potomac Appalachian Transmission Highline (“PATH”) project, PJM must make the necessary adjustments to the Transmission Enhancement Charge Adjustments to ensure that the amounts recovered by Transmission Enhancement Charge

Adjustments with respect to that project “reflect only the amounts the Commission authorizes the owner(s) to recover prior to January 1, 2016.” On January 19, 2017, the Commission issued Opinion No. 554 in Docket No. ER12-2708-003, addressing the PATH project owners’ cost recovery.<sup>26</sup> Opinion No. 554 is pending on rehearing. Moreover, under Opinion No. 554, the Commission did not require the owners of the PATH project to adjust their collections for the period prior to January 1, 2016, but instead directed them to issue refunds with interest associated with the decision in Opinion No. 554 as prospective credits against charges recovered after the decision pursuant to the annual update process described in the project owners’ formula rate protocols.<sup>27</sup> The PATH project owners began providing those credits through the annual update mechanism in 2018.<sup>28</sup> Because Opinion No. 554 is not final and because the issuance of refunds as credits against future charges, in accordance that decision by the owners of the PATH project ensures that the Transmission Enhancement Adjustments reflect only the amounts the Commission authorizes them to recover prior to January 1, 2016, no adjustments are required under the Settlement, section 2.2(e)(1).

## **II. DOCUMENTS ENCLOSED**

1. This transmittal letter;
2. Attachment A – Redlines of Schedule 12-C and Appendices and Schedule 12-Appendix, effective January 1, 2016 and forward; and
3. Attachment B – Clean Versions of Schedule 12-C and Appendices and Schedule 12-Appendix, effective January 1, 2016 and forward.

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<sup>26</sup> *Potomac-Appalachian Transmission Highline, LLC*, Opinion No. 554, 158 FERC ¶ 61,050 (2017).

<sup>27</sup> *Id.* at PP 85-86.

<sup>28</sup> *See* Compliance Filing, Docket Nos. ER12-2708-005, *et al.* (filed March 20, 2017).

### III. COMMUNICATIONS

The following individuals are designated for receipt of any communications regarding this filing:

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### IV. SERVICE

PJM has served a copy of this filing on all PJM Members and on all state utility regulatory commissions in the PJM Region by posting this filing electronically. In accordance with the Commission's regulations,<sup>29</sup> PJM will post a copy of this filing to the FERC filings section of its internet site, located at the following link: <http://www.pjm.com/documents/ferc-manuals/ferc-filings.aspx> with a specific link to the newly-filed document, and will send an e-mail on the same date as this filing to all PJM Members and all state utility regulatory commissions in the PJM Region<sup>30</sup> alerting them that this filing has been made by PJM and is available by following such link. If the document is not immediately available by using the referenced link, the document will be available through the referenced link within 24 hours of the filing. Also, a copy of this filing will be available on the FERC's eLibrary website located at the

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<sup>29</sup> See 18C.F.R §§ 35.2(e) and 385.2010(f)(3) (2018).

<sup>30</sup> PJM already maintains, updates and regularly uses e-mail lists for all PJM Members and affected state commissions.

following link: <http://www.ferc.gov/docs-filing/elibrary.asp> in accordance with the  
Commission's regulations and Order No. 714.

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Respectfully submitted,

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*On behalf of PJM Interconnection, L.L.C.*

Dated: July 30, 2018

## **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that I have this day caused to be served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Audubon, PA, this 30<sup>th</sup> day of July, 2018.

By: \_\_\_\_\_



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*On behalf of PJM Interconnection, L.L.C.*

# **ATTACHMENT A**

Schedule 12 – Appendix  
Versions effective January 1, 2016 - 2016 Annual Update

(Marked Format)



## SCHEDULE 12 – APPENDIX

### (1) Atlantic City Electric Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0135	Build new Cumberland – Dennis 230 kV circuit which replaces existing Cumberland – Corson 138 kV		AEC (100%)
b0136	Install Dennis 230/138 kV transformer, Dennis 150 MVAR SVC and 50 MVAR capacitor		AEC (100%)
b0137	Build new Dennis – Corson 138 kV circuit		AEC (100%)
b0138	Install Cardiff 230/138 kV transformer and a 50 MVAR capacitor at Cardiff		AEC (100%)
b0139	Build new Cardiff – Lewis 138 kV circuit		AEC (100%)
b0140	Reconductor Laurel – Woodstown 69 kV		AEC (100%)
b0141	Reconductor Monroe – North Central 69 kV		AEC (100%)
b0265	Upgrade AE portion of Delco Tap – Mickleton 230 kV circuit		AEC (88.94%) / ConEd (1.04%) / JCPL (9.38%) / Neptune* (0.64%)
b0276	Replace both Monroe 230/69 kV transformers		AEC (91.28%) / PSEG (8.29%) / RE (0.23%) / ECP** (0.20%)
b0276.1	Upgrade a strand bus at Monroe to increase the rating of transformer #2		AEC (100%)
b0277	Install a second Cumberland 230/138 kV transformer		AEC (100%)
b0281.1	Install 35 MVAR capacitor at Lake Ave 69 kV substation		AEC (100%)
b0281.2	Install 15 MVAR capacitor at Shipbottom 69 kV substation		AEC (100%)
b0281.3	Install 8 MVAR capacitors on the AE distribution system		AEC (100%)

## Atlantic City Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0142	Reconductor Landis – Minotola 138 kV		AEC (100%)
b0143	Reconductor Beckett – Paulsboro 69 kV		AEC (100%)
b0210	Install a new 500/230kV substation in AEC area. The high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPSCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (100%)</u></p>
b0210	Install a new 500/230kV substation in AEC area, the high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.		AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)††
b0211	Reconductor Union - Corson 138kV circuit		AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)
b0212	Substation upgrades at Union and Corson 138kV		AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

**Atlantic City Electric Company (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0214	Install 50 MVAR capacitor at Cardiff 230kV substation		AEC (100%)
b0431	Monroe Upgrade New Freedom strand bus		AEC (100%)
b0576	Move the Monroe 230/69 kV to Mickleton		AEC (100%)
b0744	Upgrade a strand bus at Mill 138 kV		AEC (100%)
b0871	Install 35 MVAR capacitor at Motts Farm 69 kV		AEC (100%)
b1072	Modify the existing EMS load shedding scheme at Cedar to additionally sense the loss of both Cedar 230/69 kV transformers and shed load accordingly		AEC (100%)
b1127	Build a new Lincoln-Minitola 138 kV line		AEC (100%)
b1195.1	Upgrade the Corson sub T2 terminal		AEC (100%)
b1195.2	Upgrade the Corson sub T1 terminal		AEC (100%)
b1244	Install 10 MVAR capacitor at Peermont 69 kV substation		AEC (100%)
b1245	Rebuild the Newport-South Millville 69 kV line		AEC (100%)

## Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1250	Reconductor the Monroe – Glassboro 69 kV	AEC (100%)
b1250.1	Upgrade substation equipment at Glassboro	AEC (100%)
b1280	Sherman: Upgrade 138/69 kV transformers	AEC (100%)
b1396	Replace Lewis 138 kV breaker ‘L’	AEC (100%)
b1398.5	Reconductor the existing Mickleton – Gloucester 230 kV circuit (AE portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1598	Reconductor Sherman Av – Carl’s Corner 69kV circuit	AEC (100%)
b1599	Replace terminal equipments at Central North 69 kV substation	AEC (100%)
b1600	Upgrade the Mill T2 138/69 kV transformer	AEC (88.83%) / JCPL (4.74%) / HTP (0.20%) / ECP** (0.22%) / PSEG (5.78%) / RE (0.23%)
b2157	Re-build 5.3 miles of the Corson - Tuckahoe 69 kV circuit	AEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

## SCHEDULE 12 – APPENDIX

### (3) Delmarva Power & Light Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0144.1	Build new Red Lion – Milford – Indian River 230 kV circuit		DPL (100%)
b0144.2	Indian River Sub – 230 kV Terminal Position		DPL (100%)
b0144.3	Red Lion Sub – 230 kV Terminal Position		DPL (100%)
b0144.4	Milford Sub – (2) 230 kV Terminal Positions		DPL (100%)
b0144.5	Indian River – 138 kV Transmission Line to AT-20		DPL (100%)
b0144.6	Indian River – 138 & 69 kV Transmission Ckts. Undergrounding		DPL (100%)
b0144.7	Indian River – (2) 230 kV bus ties		DPL (100%)
b0148	Re-rate Glasgow – Mt. Pleasant 138 kV and North Seaford – South Harrington 138 kV		DPL (100%)
b0149	Complete structure work to increase rating of Cheswold – Jones REA 138 kV		DPL (100%)
b0221	Replace disconnect switch on Edgewood-N. Salisbury 69 kV		DPL (100%)
b0241.1	Keeny Sub – Replace overstressed breakers		DPL (100%)
b0241.2	Edgemoor Sub – Replace overstressed breakers		DPL (100%)
b0241.3	Red Lion Sub – Substation reconfigure to provide for second Red Lion 500/230 kV transformer		DPL (84.5%) / PECO (15.5%)
b0261	Replace 1200 Amp disconnect switch on the Red Lion – Reybold 138 kV circuit		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0262	Reconductor 0.5 miles of Christiana – Edgemoor 138 kV		DPL (100%)
b0263	Replace 1200 Amp wavetrap at Indian River on the Indian River – Frankford 138 kV line		DPL (100%)
b0272.1	Replace line trap and disconnect switch at Keeney 500 kV substation – 5025 Line Terminal Upgrade		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPSCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (22.51%) / APS (0.28%) / BGE (0.48%) / DPL (52.85%) / ECP (0.02%) / HTP (0.03%) / PECO (23.16%) / PEPSCO (0.43%) / PPL (0.24%)</p>
b0282	Install 46 MVAR capacitors on the DPL distribution system		DPL (100%)
b0291	Replace 1600A disconnect switch at Harmony 230 kV and for the Harmony – Edgemoor 230 kV circuit, increase the operating temperature of the conductor		DPL (100%)
b0295	Raise conductor temperature of North Seaford – Pine Street – Dupont Seaford		DPL (100%)
b0296	Rehoboth/Cedar Neck Tap (6733-2) upgrade		DPL (100%)
b0320	Create a new 230 kV station that splits the 2 <sup>nd</sup> Milford to Indian River 230 kV line, add a 230/69 kV transformer, and run a new 69 kV line down to Harbeson 69 kV		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0382	Cambridge Sub – Close through to Todd Substation		DPL (100%)
b0383	Wye Mills AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0384	Replace Indian River AT-20 (400 MVA)		DPL (100%)
b0385	Oak Hall to New Church (13765) Upgrade		DPL (100%)
b0386	Cheswold/Kent (6768) Rebuild		DPL (100%)
b0387	N. Seaford – Add a 2 <sup>nd</sup> 138/69 kV autotransformer		DPL (100%)
b0388	Hallwood/Parksley (6790-2) Upgrade		DPL (100%)
b0389	Indian River AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0390	Rehoboth/Lewes (6751-1 and 6751-2) Upgrade		DPL (100%)
b0391	Kent/New Meredith (6704-2) Upgrade		DPL (100%)
b0392	East New Market Sub – Establish a 69 kV Bus Arrangement		DPL (100%)
b0415	Increase the temperature ratings of the Edgemoor – Christiana – New Castle 138 kV by replacing six transmission poles		DPL (100%)
b0437	Spare Keeney 500/230 kV transformer		DPL (100%)
b0441	Additional spare Keeney 500/230 kV transformer		DPL (100%)
b0480	Rebuild Lank – Five Points 69 kV		DPL (100%)
b0481	Replace wave trap at Indian River 138 kV on the Omar – Indian River 138 kV circuit		DPL (100%)
b0482	Rebuild Millsboro – Zoar REA 69 kV		DPL (100%)
b0483	Replace Church 138/69 kV transformer and add two breakers		DPL (100%)
b0483.1	Build Oak Hall – Wattsville 138 kV line		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0483.2	Add 138/69 kV transformer at Wattsville		DPL (100%)
b0483.3	Establish 138 kV bus position at Oak Hall		DPL (100%)
b0484	Re-tension Worcester – Berlin 69 kV for 125°C		DPL (100%)
b0485	Re-tension Taylor – North Seaford 69 kV for 125°C		DPL (100%)
b0494.1	Install a 2 <sup>nd</sup> Red Lion 230/138 kV		DPL (100%)
b0494.2	Hares Corner – Relay Improvement		DPL (100%)
b0494.3	Reybold – Relay Improvement		DPL (100%)
b0494.4	New Castle – Relay Improvement		DPL (100%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>



**Delmarva Power & Light Company (cont.)**

<b><u>Required Transmission Enhancements</u></b>		<b><u>Annual Revenue Requirement</u></b>	<b><u>Responsible Customer(s)</u></b>
b0513	Rebuild the Ocean Bay – Maridel 69 kV line		DPL (100%)
b0527	Replace existing 12 MVAR capacitor at Bethany with a 30 MVAR capacitor		DPL (100%)
b0528	Replace existing 69/12 kV transformer at Bethany with a 138/12 kV transformer		DPL (100%)
b0529	Install an additional 8.4 MVAR capacitor at Grasonville 69 Kv		DPL (100%)
b0530	Replace existing 12 MVAR capacitor at Wye Mills with a 30 MVAR capacitor		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0531	Create a four breaker 138 kV ring bus at Wye Mills and add a second 138/69 kV transformer		DPL (100%)
b0566	Rebuild the Trappe Tap – Todd 69 kV line		DPL (100%)
b0567	Rebuild the Mt. Pleasant – Townsend 138 kV line		DPL (100%)
b0568	Install a third Indian River 230/138 kV transformer		DPL (100%)
b0725	Add a third Steele 230/138 kV transformer		DPL (100%)
b0732	Rebuild Vaugh – Wells 69 kV		DPL (100%)
b0733	Add a second 230/138 kV transformer at Harmony		DPL (97.06%) / PECO (2.94%)
b0734	Rebuild Church – Steele 138 kV		DPL (100%)
b0735	Rebuild Indian River – Omar – Bethany 138 kV		DPL (100%)
b0736	Rebuild Dupont Edgemoor – Edgemoor – Silverside 69 kV		DPL (69.46%) / PECO (17.25%) / ECP** (0.27%) / PSEG (12.53%) / RE (0.49%)
b0737	Build a new Indian River – Bishop 138 kV line		DPL (100%)
b0750	Convert 138 kV network path from Vienna – Loretto – Piney - Grove to 230 kV, add 230/138 kV transformer to Loretto 230 kV		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0751	Add two additional breakers at Keeney 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  DPL (100%)</p>
b0752	Replace two circuit breakers to bring the emergency rating up to 348 MVA	DPL (100%)
b0753	Add a second Loretto 230/138 kV transformer	DPL (100%)
b0754	Rebuild 10 miles of Glasgow to Mt. Pleasant 138 kV line to bring the normal rating to 298 MVA and the emergency rating to 333 MVA	DPL (100%)
b0792	Reconfigure Cecil Sub into 230 and 138 kV ring buses, add a 230/138 kV transformer, and operate the 34.5 kV bus normally open	DPL (100%)
b0873	Build 2nd Glasgow-Mt Pleasant 138 kV line	DPL (100%)
b0874	Reconfigure Brandywine substation	DPL (100%)
b0876	Install 50 MVAR SVC at 138th St 138 kV	DPL (100%)
b0877	Build a 2nd Vienna-Steele 230 kV line	DPL (100%)
b0879.1	Apply a special protection scheme (load drop at Stevensville and Grasonville)	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1246	Re-build the Townsend – Church 138 kV circuit		DPL (100%)
b1247	Re-build the Glasgow – Cecil 138 kV circuit		DPL (72.06%) / PECO (27.94%)
b1248	Install two 15 MVAR capacitor at Loretto 69 kV		DPL (100%)
b1249	Reconfigure the existing Sussex 69 kV capacitor		DPL (100%)
b1603	Upgrade 19 miles conductor of the Wattsville - Signepost - Stockton - Kenney 69 kV circuit		DPL (100%)
b1604	Replace CT at Reybold 138 kV substation		DPL (100%)
b1723	Replace strand bus and disconnect switch at Glasgow 138 kV substation		DPL (100%)
b1899.1	Install new variable reactors at Indian River and Nelson 138 kV		DPL (100%)
b1899.2	Install new variable reactors at Cedar Creek 230 kV		DPL (100%)
b1899.3	Install new variable reactors at New Castle 138 kV and Easton 69 kV		DPL (100%)

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The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-3.

## SCHEDULE 12 – APPENDIX

### (5) Metropolitan Edison Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0215	Install 230Kv series reactor and 2- 100MVAR PLC switched capacitors at Hunterstown	AEC (6.68%) / APS (3.95%) / ConEd (0.42%) / DPL (9.06%) / JCPL (16.78%) / ME (10.49%) / Neptune* (1.68%) / PECO (18.92%) / PPL (7.52%) / PSEG (22.57%) / RE (0.34%) / UGI (0.95%) / ECP** (0.64%)
b0404.1	Replace South Reading 230 kV breaker 107252	ME (100%)
b0404.2	Replace South Reading 230 kV breaker 100652	ME (100%)
b0575.1	Rebuild Hunterstown – Texas Eastern Tap 115 kV	ME (100%)
b0575.2	Rebuild Texas Eastern Tap – Gardners 115 kV and associated upgrades at Gardners including disconnect switches	ME (100%)
b0650	Reconductor Jackson – JE Baker – Taxville 115 kV line	ME (100%)
b0652	Install bus tie circuit breaker on Yorkana 115 kV bus and expand the Yorkana 230 kV ring bus by one breaker so that the Yorkana 230/115 kV banks 1, 3, and 4 cannot be lost for either B-14 breaker fault or a 230 kV line or bank fault with a stuck breaker	ME (100%)

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**(5) Metropolitan Edison Company**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0653 Construct a 230 kV Bernville station by tapping the North Temple – North Lebanon 230 kV line. Install a 230/69 kV transformer at existing Bernville 69 kV station		ME (100%)
b1000 Replace Portland 115kV breaker '95312'		ME (100%)
b1001 Replace Portland 115kV breaker '92712'		ME (100%)
b1002 Replace Hunterstown 115 kV breaker '96392'		ME (100%)
b1003 Replace Hunterstown 115 kV breaker '96292'		ME (100%)
b1004 Replace Hunterstown 115 kV breaker '99192'		ME (100%)
b1061 Replace existing Yorkana 230/115 kV transformer banks 1 and 4 with a single, larger transformer similar to transformer bank #3		ME (100%)
b1061.1 Replace the Yorkana 115 kV breaker '97282'		ME (100%)
b1061.2 Replace the Yorkana 115 kV breaker 'B282'		ME (100%)
b1302 Replace the limiting bus conductor and wave trap at the Jackson 115 kV terminal of the Jackson – JE Baker Tap 115 kV line		ME (100%)
b1365 Reconductor the Middletown – Collins 115 kV (975) line 0.32 miles of 336 ACSR		ME (100%)
b1366 Reconductor the Collins – Cly – Newberry 115 kV (975) line 5 miles with 795 ACSR		ME (100%)

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(5) Metropolitan Edison Company

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

b1727	Reconductor 2.4 miles of existing 556 and 795 ACSR from Harley Davidson to Pleasureville 115 kV with 795 ACSS to raise the ratings		ME (100%)
b1800	Install a 500 MVAR SVC at the existing Hunterstown 500kV substation		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>BGE (54.22%) / DPL (21.56%) / ME (24.22%)</u></p>
b1801	Build a 250 MVAR SVC at Altoona 230 kV		AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / Neptune* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)
b1816.5	Replace SCCIR (Sub-conductor) at Hunterstown Substation on the No. 1, 230/115 kV transformer		ME (100%)
b1999	Replace limiting wave trap, circuit breaker, substation conductor, relay and current transformer components at Northwood		ME (100%)
b2000	Replace limiting wave trap on the Glendon - Hosensack line		ME (100%)
b2001	Replace limiting circuit breaker and substation conductor transformer components at Portland 230kV		ME (100%)

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**(5) Metropolitan Edison Company**

Required Transmission Enhancements   Annual Revenue Requirement   Responsible Customer(s)

b2002	Northwood 230/115 kV Transformer upgrade		ME (100%)
b2023	Construct a new North Temple - Riverview - Cartech 69 kV line (4.7 miles) with 795 ACSR		ME (100%)
b2024	Upgrade 4/0 substation conductors at Middletown 69 kV		ME (100%)
b2025	Upgrade 4/0 and 350 Cu substation conductors at the Middletown Junction terminal of the Middletown Junction - Wood Street Tap 69 kV line		ME (100%)
b2026	Upgrade an OC protection relay at the Baldy 69 kV substation		ME (100%)
b2148	Install a 115 kV 28.8 MVAR capacitor at Pleasureville substation		ME (100%)
b2149	Upgrade substation riser on the Smith St. - York Inc. 115 kV line		ME (100%)
b2150	Upgrade York Haven structure 115 kV bus conductor on Middletown Jct. - Zions View 115 kV		ME (100%)

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## SCHEDULE 12 – APPENDIX

### (7) Pennsylvania Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.1	Build 500 kV substation in PENELEC – Tap the Keystone – Juniata and Conemaugh – Juniata 500 kV, connect the circuits with a breaker and half scheme, and install new 400 MVAR capacitor	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0284.3	Replace wave trap and upgrade a bus section at Keystone 500 kV – on the Keystone – Airydale 500 kV	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0285.1	Replace wave trap at Keystone 500 kV – on the Keystone – Conemaugh 500 kV	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0285.2	Replace wave trap and relay at Conemaugh 500 kV – on the Conemaugh – Keystone 500 kV	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0349	Upgrade Rolling Meadows-Gore Jct 115 kV	PENELEC (100%)
b0360	Construction of a ring bus on the 345 kV side of Wayne substation	PENELEC (100%)
b0365	Add a 50 MVAR, 230 kV cap bank at Altoona 230 kV	PENELEC (100%)
b0369	Install 100 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0370	Install 500 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0376	Install 300 MVAR capacitor at Conemaugh 500 kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (6.58%) / ECP (0.88%) / HTP (0.82%) / JCPL (23.16%) / ME (12.80%) / NEPTUNE (2.33%) / PECO (23.16%) / PSEG (29.08%) / RE (1.19%)</u></p>
b0442	Spare Keystone 500/230 kV transformer	PENELEC (100%)
b0515	Replace Lewistown circuit breaker 1LY Yeagertown	PENELEC (100%)
b0516	Replace Lewistown circuit breaker 2LY Yeagertown	PENELEC (100%)
b0517	Replace Shawville bus section circuit breaker	PENELEC (100%)
b0518	Replace Homer City circuit breaker 201 Johnstown	PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0519	Replace Keystone circuit breaker 4 Transformer - 20		PENELEC (100%)
b0549	Install 250 MVAR capacitor at Keystone 500 kV		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (5.58%) / BGE (15.73%) / DPL (5.84%) / ECP (0.61%) / HTP (0.55%) / JCPL (17.34%) / ME (11.09%) / NEPTUNE (1.75%) / PECO (19.53%) / PSEG (21.12%) / RE (0.86%)</u>
b0550	Install 25 MVAR capacitor at Lewis Run 115 kV substation		AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0551	Install 25 MVAR capacitor at Saxton 115 kV substation		AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0552	Install 50 MVAR capacitor at Altoona 230 kV substation		AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0553	Install 50 MVAR capacitor at Raystown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0555	Install 100 MVAR capacitor at Johnstown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0556	Install 50 MVAR capacitor at Grover 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0557	Install 75 MVAR capacitor at East Towanda 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0563	Install 25 MVAR capacitor at Farmers Valley 115 kV substation	PENELEC (100%)
b0564	Install 10 MVAR capacitor at Ridgeway 115 kV substation	PENELEC (100%)
b0654	Reconfigure the Cambria Slope 115 kV and Wilmore Junction 115 kV stations to eliminate Wilmore Junction 115 kV 3-terminal line	PENELEC (100%)
b0655	Reconfigure and expand the Glade 230 kV ring bus to eliminate the Glade Tap 230 kV 3-terminal line	PENELEC (100%)
b0656	Add three breakers to form a ring bus at Altoona 230 kV	PENELEC (100%)

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**Pennsylvania Electric Company (cont.)****Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)**

b0794	Upgrade the Homer City 230 kV breaker 'Pierce Road'		PENELEC (100%)
b1005	Replace Glory 115 kV breaker '#7 XFMR'		PENELEC (100%)
b1006	Replace Shawville 115 kV breaker 'NO.14 XFMR'		PENELEC (100%)
b1007	Replace Shawville 115 kV breaker 'NO.15 XFMR'		PENELEC (100%)
b1008	Replace Shawville 115 kV breaker '#1B XFMR'		PENELEC (100%)
b1009	Replace Shawville 115 kV breaker '#2B XFMR'		PENELEC (100%)
b1010	Replace Shawville 115 kV breaker 'Dubois'		PENELEC (100%)
b1011	Replace Shawville 115 kV breaker 'Philipsburg'		PENELEC (100%)
b1012	Replace Shawville 115 kV breaker 'Garman'		PENELEC (100%)
b1059	Replace a CRS relay at Hooversville 115 kV station		PENELEC (100%)
b1060	Replace a CRS relay at Rachel Hill 115 kV station		PENELEC (100%)

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**Pennsylvania Electric Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1153	Upgrade Conemaugh 500/230 kV transformer and add a new line from Conemaugh-Seward 230 kV		AEC (3.72%) / APS (6.23%) / BGE (16.75%) / ConEd (0.39%) / DL (0.32%) / JCPL (12.52%) / ME (6.87%) / PECO (11.49%) / PEPSCO (0.55%) / PPL (15.36%) / PSEG (20.44%) / RE (0.71%) / NEPTUNE* (1.70%) / ECP** (2.95%)
b1153.1	Revise the reclosing on the Shelocta 115 kV breaker 'Lucerne'		PENELEC (100%)
b1169	Replace Shawville 115 kV breaker '#1A XFMR'		PENELEC (100%)
b1170	Replace Shawville 115 kV breaker '#2A XFMR'		PENELEC (100%)
b1277	Build a new Osterburg East – Bedford North 115 kV Line, 5.7 miles of 795 ACSR		PENELEC (100%)
b1278	Install 25 MVAR Capacitor Bank at Somerset 115 kV		PENELEC (100%)
b1367	Replace the Cambria Slope 115/46 kV 50 MVA transformer with 75 MVA		PENELEC (100%)
b1368	Replace the Claysburg 115/46 kV 30 MVA transformer with 75 MVA		PENELEC (100%)
b1369	Replace the 4/0 CU substation conductor with 795 ACSR on the Westfall S21 Tap 46 kV line		PENELEC (100%)
b1370	Install a 3rd 115/46 kV transformer at Westfall		PENELEC (100%)
b1371	Reconductor 2.6 miles of the Claysburg – HCR 46 kV line with 636 ACSR		PENELEC (100%)



## Pennsylvania Electric Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1372	Replace 4/0 CU substation conductor with 795 ACSR on the Hollidaysburg – HCR 46 kV		PENELEC (100%)
b1373	Re-configure the Erie West 345 kV substation, add a new circuit breaker and relocate the Ashtabula line exit		PENELEC (100%)
b1374	Replace wave traps at Raritan River and Deep Run 115 kV substations with higher rated equipment for both B2 and C3 circuits		PENELEC (100%)
b1535	Reconductor 0.8 miles of the Gore Junction – ESG Tap 115 kV line with 795 ACSR		PENELEC (100%)
b1607	Reconductor the New Baltimore - Bedford North 115 kV		PENELEC (100%)
b1608	Construct a new 345/115 kV substation and loop the Mansfield - Everts 115 kV		APS (8.57%) / ConEd (0.47%) / PECO (1.71%) / PENELEC (89.25%)
b1609	Construct Four Mile Junction 230/115 kV substation. Loop the Erie South - Erie East 230 kV line, Buffalo Road - Corry East and Buffalo Road - Erie South 115 kV lines		APS (4.86%) / PENELEC (95.14%)
b1610	Install a new 230 kV breaker at Yeagertown		PENELEC (100%)
b1713	Install a 345 kV breaker at Erie West and relocate Ashtabula 345 kV line		PENELEC (100%)
b1769	Install a 75 MVAR cap bank on the Four Mile 230 kV bus		PENELEC (100%)

\* Neptune Regional Transmission System, LLC

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1770	Install a 50 MVAR cap bank on the Buffalo Road 115 kV bus		PENELEC (100%)
b1802	Build a 100 MVAR Fast Switched Shunt and 200 MVAR Switched Shunt at Mansfield 345 kV		AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / NEPTUNE* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)
b1821	Replace the Erie South 115 kV breaker 'Union City'		PENELEC (100%)
b1943	Construct a 115 kV ring bus at Claysburg Substation. Bedford North and Saxton lines will no longer share a common breaker		PENELEC (100%)
b1944	Reconductor Eclipse substation 115 kV bus with 1033 kcmil conductor		PENELEC (100%)
b1945	Install second 230/115 kV autotransformer at Johnstown		PENELEC (100%)
b1966	Replace the 1200 Amp Line trap at Lewistown on the Raystown-Lewistown 230 kV line and replace substation conductor at Lewistown		PENELEC (100%)
b1967	Replace the Blairsville 138/115 kV transformer		PENELEC (100%)
b1990	Install a 25 MVAR 115 kV Capacitor at Grandview		PENELEC (100%)
b1991	Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the Homer City-Stolle Road 345 kV line into Farmers Valley		PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1992	Reconductor Cambria Slope-Summit 115kV with 795 ACSS Conductor	PENELEC (100%)
b1993	Relocate the Erie South 345 kV line terminal	APS (10.09%) / ECP** (0.45%) / HTP (0.49%) / JCPL (5.14%) / Neptune* (0.54%) / PENELEC (70.71%) / PSEG (12.10%) / RE (0.48%)
b1994	Convert Lewis Run-Farmers Valley to 230 kV using 1033.5 ACSR conductor. Project to be completed in conjunction with new Farmers Valley 345/230 kV transformation	APS (33.20%) / ECP** (0.44%) / HTP (0.44%) / JCPL (8.64%) / ME (5.52%) / Neptune (0.86%) / PENELEC (36.81%) / PSEG (13.55%) / RE (0.54%)
b1995	Change CT Ratio at Claysburg	PENELEC (100%)
b1996.1	Replace 600 Amp Disconnect Switches on Ridgeway-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1996.2	Reconductor Ridgway and Whetstone 115 kV Bus	PENELEC (100%)
b1996.3	Replace Wave Trap at Ridgway	PENELEC (100%)
b1996.4	Change CT Ratio at Ridgway	PENELEC (100%)
b1997	Replace 600 Amp Disconnect Switches on Dubois-Harvey Run-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville	PENELEC (100%)

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**Pennsylvania Electric Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

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## SCHEDULE 12 – APPENDIX

### (8) PECO Energy Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0171.1	Replace two 500 kV circuit breakers and two wave traps at Elroy substation to increase rating of Elroy - Hosensack 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (5.65%) / DPL (11.27%) / JCPL (15.28%) / NEPTUNE (0.01%) / PECO (67.73%) / PSEG (0.06%)</p>
b0180	Replace Whitpain 230kV circuit breaker #165	PECO (100%)
b0181	Replace Whitpain 230kV circuit breaker #J105	PECO (100%)
b0182	Upgrade Plymouth Meeting 230kV circuit breaker #125	PECO (100%)
b0205	Install three 28.8Mvar capacitors at Planebrook 35kV substation	PECO (100%)
b0206	Install 161Mvar capacitor at Planebrook 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)
b0207	Install 161Mvar capacitor at Newlinville 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)
b0208	Install 161Mvar capacitor Heaton 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)
b0209	Install 2% series reactor at Chichester substation on the Chichester - Mickleton 230kV circuit	AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0264	Upgrade Chichester – Delco Tap 230 kV and the PECO portion of the Delco Tap – Mickleton 230 kV circuit	AEC (88.94%) / ConEd (1.04%) / JCPL (9.38%) / Neptune* (0.64%)
b0266	Replace two wave traps and ammeter at Peach Bottom, and two wave traps and ammeter at Newlinville 230 kV substations	PECO (100%)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)†</p> <p><b><u>DFAX Allocation:</u></b>  <u>PECO (100%)</u></p>
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.1	Add a new 230 kV circuit between Whitpain and Heaton substations	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.2	Reconductor the Whitpain 1 – Plymtg 1 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.3	Convert the Heaton bus to a ring bus	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††

\* Neptune Regional Transmission System, LLC

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269.4	Reconductor the Heaton – Warminster 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.5	Reconductor Warminster – Buckingham 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.6	Add a new 500 kV breaker at Whitpain between #3 transformer and 5029 line	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>PECO (100%)</u></p>
b0269.7	Replace North Wales 230 kV breaker #105	PECO (100%)
b0280.1	Install 161 MVAR capacitor at Warrington 230 kV substation	PECO 100%
b0280.2	Install 161 MVAR capacitor at Bradford 230 kV substation	PECO 100%
b0280.3	Install 28.8 MVAR capacitor at Warrington 34 kV substation	PECO 100%
b0280.4	Install 18 MVAR capacitor at Waverly 13.8 kV substation	PECO 100%

\* Neptune Regional Transmission System, LLC

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\*\*\* Hudson Transmission Partners, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0287	Install 600 MVAR Dynamic Reactive Device in Whitpain 500 kV vicinity	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (5.65%) / DPL (11.27%) / JCPL (15.28%) / NEPTUNE (0.01%) / PECO (67.73%) / PSEG (0.06%)</p>
b0351	Reconductor Tunnel – Grays Ferry 230 kV	PECO (100%)
b0352	Reconductor Tunnel – Parrish 230 kV	PECO (100%)
b0353.1	Install 2% reactors on both lines from Eddystone – Llanerch 138 kV	PECO (100%)
b0353.2	Install identical second 230/138 kV transformer in parallel with existing 230/138 kV transformer at Plymouth Meeting	PECO 100%
b0353.3	Replace Whitpain 230 kV breaker 135	PECO (100%)
b0353.4	Replace Whitpain 230 kV breaker 145	PECO (100%)
b0354	Eddystone – Island Road Upgrade line terminal equipment	PECO 100%
b0355	Reconductor Master – North Philadelphia 230 kV line	PECO 100%
b0357	Reconductor Buckingham – Pleasant Valley 230 kV	ConEd (1.05%) / JCPL (36.78%) / Neptune* (4.41%) / PSEG (53.57%) / RE (2.30%) / ECP** (1.89%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

†† Cost allocations associated with below 500 kV elements of the project



**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0359	Reconductor North Philadelphia – Waneeta 230 kV circuit	PECO 100%
b0402.1	Replace Whitpain 230 kV breaker #245	PECO (100%)
b0402.2	Replace Whitpain 230 kV breaker #255	PECO (100%)
b0438	Spare Whitpain 500/230 kV transformer	PECO (100%)
b0443	Spare Peach Bottom 500/230 kV transformer	PECO (100%)
b0505	Reconductor the North Wales – Whitpain 230 kV circuit	AEC (8.56%) / ConEd (0.21%) / DPL (7.74%) PECO (83.49%)
b0506	Reconductor the North Wales – Hartman 230 kV circuit	AEC (8.56%) / ConEd (0.21%) / DPL (7.74%) PECO (83.49%)
b0507	Reconductor the Jarrett – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) PECO (83.66%)
b0508.1	Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit	PECO (100%)
b0509	Reconductor the Jarrett – Heaton 230 kV circuit	PECO (100%)
b0727	Rebuild Bryn Mawr – Plymouth Meeting 138 kV line	AEC (1.25%) / DPL (3.11%) / PECO (95.64%)
b0789	Reconductor the line to provide a normal rating of 677 MVA and an emergency rating of 827 MVA	AEC (0.72%) / JCPL (17.36%) / NEPTUNE* (1.70%) / PECO (44.47%) / ECP** (0.92%) / PSEG (33.52%) / RE (1.31%)
b0790	Reconductor the Bradford – Planebrook 230 kV Ckt. 220-31 to provide a normal rating of 677 MVA and emergency rating of 827 MVA	JCPL (17.30%) / NEPTUNE* (1.69%) / PECO (45.09%) / ECP** (0.93%) / PSEG (33.68%) / RE (1.31%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**PECO Energy Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0829.1	Replace Whitpain 230 kV breaker '155'		PECO (100%)
b1073	Install 2 new 230 kV breakers at Planebrook (on the 220-02 line terminal and on the 230 kV side of the #9 transformer)		PECO (100%)
b0829.2	Replace Whitpain 230 kV breaker '525'		PECO (100%)
b0829.3	Replace Whitpain 230 kV breaker '175'		PECO (100%)
b0829.4	Replace Plymouth Meeting 230 kV breaker '225'		PECO (100%)
b0829.5	Replace Plymouth Meeting 230 kV breaker '335'		PECO (100%)
b0841	Move the connection points for the 2nd Plymouth Meeting 230/138 kV XFMR		PECO (100%)
b0842	Install a 2nd 230/138 kV XFMR and 35 MVAR CAP at Heaton 138 kV bus		PECO (100%)
b0842.1	Replace Heaton 138 kV breaker '150'		PECO (100%)
b0843	Install a 75 MVAR CAP at Llanerch 138 kV bus		PECO (100%)
b0844	Move the connection point for the Llanerch 138/69 kV XFMR		PECO (100%)
b0887	Replace Richmond-Tacony 69 kV line		PECO (100%)
b0920	Replace station cable at Whitpain and Jarrett substations on the Jarrett - Whitpain 230 kV circuit		PECO (100%)

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\*\* East Coast Power, L.L.C.

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1014.1	Replace Circuit breaker, Station Cable, CTs and Wave Trap at Eddystone 230 kV	PECO (100%)
b1014.2	Replace Circuit breaker, Station Cable, CTs Disconnect Switch and Wave Trap at Island Rd. 230 kV	PECO (100%)
b1015	Replace Breakers #115 and #125 at Printz 230 kV substation	PECO (100%)
b1156.1	Upgrade at Richmond 230 kV breaker '525'	PECO (100%)
b1156.2	Upgrade at Richmond 230 kV breaker '415'	PECO (100%)
b1156.3	Upgrade at Richmond 230 kV breaker '475'	PECO (100%)
b1156.4	Upgrade at Richmond 230 kV breaker '575'	PECO (100%)
b1156.5	Upgrade at Richmond 230 kV breaker '185'	PECO (100%)
b1156.6	Upgrade at Richmond 230 kV breaker '285'	PECO (100%)
b1156.7	Upgrade at Richmond 230 kV breaker '85'	PECO (100%)
b1156.8	Upgrade at Waneeta 230 kV breaker '425'	PECO (100%)
b1156.9	Upgrade at Emilie 230 kV breaker '815'	PECO (100%)
b1156.10	Upgrade at Plymouth Meeting 230 kV breaker '265'	PECO (100%)
b1156.11	Upgrade at Croydon 230 kV breaker '115'	PECO (100%)
b1156.12	Replace Emilie 138 kV breaker '190'	PECO (100%)

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\*\* East Coast Power, L.L.C.

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1178	Add a second 230/138 kV transformer at Chichester. Add an inductor in series with the parallel transformers	JCPL (4.14%) / Neptune (0.44%) / PECO (82.19%) / ECP (0.33%) / HTP (0.32%) / PSEG (12.10%) / RE (0.48%)
b1179	Replace terminal equipment at Eddystone and Saville and replace underground section of the line	PECO (100%)
b1180.1	Replace terminal equipment at Chichester	PECO (100%)
b1180.2	Replace terminal equipment at Chichester	PECO (100%)
b1181	Install 230/138 kV transformer at Eddystone	PECO (100%)
b1182	Reconductor Chichester – Saville 138 kV line and upgrade terminal equipment	JCPL (5.08%) / Neptune (0.54%) / PECO (78.85%) / ECP (0.39%) / HTP (0.38%) / PSEG (14.20%) / RE (0.56%)
b1183	Replace 230/69 kV transformer #6 at Cromby. Add two 50 MVAR 230 kV banks at Cromby	PECO (100%)
b1184	Add 138 kV breakers at Cromby, Perkiomen, and North Wales; add a 35 MVAR capacitor at Perkiomen 138 kV	PECO (100%)
b1185	Upgrade Eddystone 230 kV breaker #365	PECO (100%)
b1186	Upgrade Eddystone 230 kV breaker #785	PECO (100%)
b1197	Reconductor the PECO portion of the Burlington – Croydon circuit	PECO (100%)
b1198	Replace terminal equipments including station cable, disconnects and relay at Conowingo 230 kV station	PECO (100%)
b1338	Replace Printz 230 kV breaker ‘225’	PECO (100%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1339	Replace Printz 230 kV breaker '315'	PECO (100%)
b1340	Replace Printz 230 kV breaker '215'	PECO (100%)
b1398.6	Reconductor the Camden – Richmond 230 kV circuit (PECO portion) and upgrade terminal equipments at Camden substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.8	Reconductor Richmond – Waneeta 230 kV and replace terminal equipments at Richmond and Waneeta substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.12	Replace Graysferry 230 kV breaker '115'	PECO (100%)
b1398.13	Upgrade Peach Bottom 500 kV breaker '225'	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)†
b1398.14	Replace Whitpain 230 kV breaker '105'	PECO (100%)
b1590.1	Upgrade the PECO portion of the Camden – Richmond 230 kV to a six wire conductor and replace terminal equipment at Richmond.	BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPCO (1.93%) / PPL (2.46%) / ECP** (0.16%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1591	Reconductor the underground portion of the Richmond – Waneeta 230 kV and replace terminal equipment	BGE (4.54%) / DL (0.27%) / ME (1.04%) / HTP (0.03%) / PECO (88.08%) / PEPCO (2.79%) / PPL (3.25%)
b1717	Install a second Waneeta 230/138 kV transformer on a separate bus section	HTP (0.04%) / PECO (99.96%)
b1718	Reconductor the Crescentville - Foxchase 138 kV circuit	PECO (100%)
b1719	Reconductor the Foxchase - Bluegrass 138 kV circuit	PECO (100%)
b1720	Increase the effective rating of the Eddystone 230/138 kV transformer by replacing a circuit breaker at Eddystone	PECO (100%)
b1721	Increase the rating of the Waneeta - Tuna 138 kV circuit by replacing two 138 kV CTs at Waneeta	PECO (100%)
b1722	Increase the normal rating of the Cedarbrook - Whitmarsh 69 kV circuit by changing the CT ratio and replacing station cable at Whitmarsh 69 kV	PECO (100%)
b1768	Install 39 MVAR capacitor at Cromby 138 kV bus	PECO (100%)
b1900	Add a 3rd 230 kV transmission line between Chichester and Linwood substations and remove the Linwood SPS	PECO (69.62%) / JCPL (6.02%) / ATSI (1.23%) / PSEG (20.83%) / RE (0.83%) / NEPTUNE* (0.59%) / ECP** (0.45%) / HTP (0.43%)
b2140	Install a 3rd Emilie 230/138 kV transformer	PECO (97.04%) / ECP** (1.62%) / HTP (1.34%)
b2145	Replace two sections of conductor inside Richmond substation	PECO (100%)

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## SCHEDULE 12 – APPENDIX

### (9) PPL Electric Utilities Corporation

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0074	Rebuild 12 miles of S. Akron – Berks 230 kV to double circuit, looping Met Ed's S. Lebanon – S. Reading line into Berks; replacement of S. Reading 230 kV breaker 107252	PPL (100%)
b0171.2	Replace wavetrap at Hosensack 500kV substation to increase rating of Elroy - Hosensack 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (5.65%) / DPL (11.27%) / JCPL (15.28%) / NEPTUNE (0.01%) / PECO (67.73%) / PSEG (0.06%)</p>
b0172.1	Replace wave trap at Alburdis 500kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (5.23%) / ECP (1.70%) / HTP (1.45%) / JCPL (30.06%) / NEPTUNE (4.42%) / PECO (8.85%) / PSEG (46.40%) / RE (1.89%)</p>

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**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.2	Replace two wave traps at Juniata 500 kV – on the two Juniata – Airydale 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (6.58%) / ECP (0.88%) / HTP (0.82%) / JCPL (23.16%) / ME (12.80%) / NEPTUNE (2.33%) / PECO (23.16%) / PSEG (29.08%) / RE (1.19%)</u></p>
b0284.4	Changes at Juniata 500 kV substation	PPL (100%)
b0293.1	Replace wavetrap at the Martins Creek 230 kV bus	PPL (100%)
b0293.2	Raise the operating temperature of the 2-1590 ACSR to 140C for the Martins Creek – Portland 230 kV circuit	PPL (100%)
b0440	Spare Juniata 500/230 kV transformer	PPL (100%)
b0468	Build a new substation with two 150 MVA transformers between Dauphin and Hummelstown 230/69 kV substations by sectionalizing the Middletown Junction – New Lebanon 230 kV line	JCPL (4.55%) / Neptune* (0.37%) / PECO (1.79%) / PENELEC (0.33%) / PPL (86.63%) / ECP** (0.18%) / PSEG (5.93%) / RE (0.22%)
b0469	Install 130 MVAR capacitor at West Shore 230 kV line	PPL (100%)

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**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0487	Build new 500 kV transmission facilities from Susquehanna to Pennsylvania – New Jersey border at Bushkill	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  ECP (2.43%) / HTP (2.73%) / JCPL (33.42%) / Neptune (3.79%) / PSEG (55.37%) / RE (2.26%)</p>
b0487.1	Install Lackawanna 500/230 kV transformer and upgrade 230 kV substation and switchyard	PENELEC (16.90%) / PPL (77.59%) / ECP** (0.19%) / PSEG (5.13%) / RE (0.19%)
b0500.1	Conastone – Otter Creek 230 kV – Reconductor approximately 17.2 miles of 795 kcmil ACSR with new 795 kcmil ACSS operated at 160 deg C	AEC (6.27%) / DPL (8.65%) / JCPL (14.54%) / ME (10.59%) / Neptune* (1.37%) / PECO (15.66%) / PPL (21.02%) / ECP** (0.57%) / PSEG (20.56%) / RE (0.77%)

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The Annual Revenue Requirements associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-8G.

## PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0558	Install 250 MVAR capacitor at Juniata 500 kV substation		AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0593	Eldred – Pine Grove 69 kV line Rebuild Part 2: 8 miles		PPL (100%)
b0595	Rebuild Lackawanna – Edella 69 kV line to double circuit		PPL (100%)
b0596	Reconductor and rebuild Stanton – Providence 69 kV #1 and #2 lines with 69 kV design; approximately 8 miles total		PPL (100%)
b0597	Reconductor Suburban – Providence 69 kV #1 and resectionalize the Suburban 69 kV lines		PPL (100%)
b0598	Reconductor Suburban Taps #1 and #2 for 69 kV line portions		PPL (100%)
b0600	Tripp Park Substation: 69 kV tap off Stanton – Providence 69 kV line #3 to new substation		PPL (100%)
b0601	Jessup Substation: New 138/69 kV tap off of Peckville – Jackson 138/69 kV line		PPL (100%)

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**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0604	Add 150 MVA, 230/138/69 transformer #6 to Harwood substation		PPL (100%)
b0605	Reconductor Stanton – Old Forge 69 kV line and resectionalize the Jenkins – Scranton 69 kV #1 and #2 lines		PPL (100%)
b0606	New 138 kV tap off Monroe – Jackson 138 kV #1 line to Bartonsville substation		PPL (100%)
b0607	New 138 kV taps off Monroe – Jackson 138 kV lines to Stroudsburg substation		PPL (100%)
b0608	New 138 kV tap off Siegfried – Jackson 138 kV #2 to transformer #2 at Gilbert substation		PPL (100%)
b0610	At South Farmersville substation, a new 69 kV tap off Nazareth – Quarry #2 to transformer #2		PPL (100%)
b0612	Rebuild Siegfried – North Bethlehem portion (6.7 miles) of Siegfried – Quarry 69 kV line		PPL (100%)
b0613	East Tannersville Substation: New 138 kV tap to new substation		PPL (100%)
b0614	Elroy substation expansion and new Elroy – Hatfield 138/69 kV double circuit lines (1.9 miles)		PPL (100%)
b0615	Reconductor and rebuild 12 miles of Seidersville – Quakerstown 138/69 kV and a new 75 MVA, 230/69 kV transformer #4		PPL (100%)
b0616	New Springfield 230/69 kV substation and transmission line connections		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0620	New 138 kV line and terminal at Monroe 230/138 substation		PPL (100%)
b0621	New 138 kV line and terminal at Siegfried 230/138 kV substation and add a second circuit to Siegfried – Jackson for 8.0 miles		PPL (100%)
b0622	138 kV yard upgrades and transmission line rearrangements at Jackson 138/69 kV substation		PPL (100%)
b0623	New West Shore – Whitehill Taps 138/69 kV double circuit line (1.3 miles)		PPL (100%)
b0624	Reconductor Cumberland – Wertzville 69 kV portion (3.7 miles) of Cumberland – West Shore 69 kV line		PPL (100%)
b0625	Reconductor Mt. Allen – Rossmoyne 69 kV portions (1.6 miles) of West Shore – Cumberland #3 and #4 lines		PPL (100%)
b0627	Replace UG cable from Walnut substation to Center City Harrisburg substation for higher ampacity (0.25 miles)		PPL (100%)
b0629	Lincoln substation: 69 kV tap to convert to modified Twin A		PPL (100%)
b0630	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild from Landisville Tap – Mt. Joy (2 miles)		PPL (100%)
b0631	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild to double circuit from Mt. Joy – Donegal (2 miles)		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0632	Terminate new S. Manheim – Donegal 69 kV circuit into S. Manheim 69 kV #3		PPL (100%)
b0634	Rebuild S. Manheim – Fuller 69 kV portion (1.0 mile) of S. Manheim – West Hempfield 69 kV #3 line into a 69 kV double circuit		PPL (100%)
b0635	Reconductor Fuller Tap – Landisville 69 kV (4.1 miles) into a 69 kV double circuit		PPL (100%)
b0703	Berks substation modification on Berks – South Akron 230 kV line. Modification will isolate the line fault on the South Akron line and will allow Berks transformer #2 to be energized by the South Lebanon 230 kV circuit		PPL (100%)
b0705	New Derry – Millville 69 kV line		PPL (100%)
b0707	Construct Bohemia – Twin Lakes 69 kV line, install a 10.9 MVAR capacitor bank near Bohemia 69 kV substation		PPL (100%)
b0708	New 69 kV double circuit from Jackson – Lake Naomi Tap		PPL (100%)
b0709	Install new 69 kV double circuit from Carlisle – West Carlisle		PPL (100%)
b0710	Install a third 69 kV line from Reese’s Tap to Hershey substation		PPL (100%)
b0711	New 69 kV that taps West Shore – Cumberland 69 kV #1 to Whitehill 69 kV substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0712	Construct a new 69 kV line between Strassburg Tap and the Millwood – Engleside 69 kV #1 line		PPL (100%)
b0713	Construct a new 138 kV double circuit line between Dillersville Tap and the West Hempfield – Prince 138 kV line		PPL (100%)
b0714	Prepare Roseville Tap for 138 kV conversion		PPL (100%)
b0715	Transfer S. Akron – S. Manheim #1 and #2 lines from the S. Akron 69 kV Yard to the S. Akron 138 kV Yard; Install switches on S. Akron – S. Manheim 138 kV #1 and #2 lines		PPL (100%)
b0716	Add a second 69 kV line from Morgantown – Twin Valley		PPL (100%)
b0717	Rebuild existing Brunner Island – West Shore 230 kV line and add a second Brunner Island – West Shore 230 kV line		PPL (100%)
b0718	SPS scheme to drop 190 MVA of 69 kV radial load at West Shore and 56 MVA of 69 kV radial load at Cumberland		PPL (100%)
b0719	SPS scheme at Jenkins substation to open the Stanton #1 and Stanton #2 230 kV circuit breakers after the second contingency		PPL (100%)
b0791	Add a fourth 230/69 kV transformer at Stanton		PENELEC (9.55%) / PPL (90.45%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b1074	Install motor operators on the Jenkins 230 kV '2W' disconnect switch and build out Jenkins Bay 3 and have MOD '3W' operated as normally open		PPL (100%)
b0881	Install motor operators on Susquehanna T21 - Susquehanna 230 kV line East CB at Susquehanna 230 kV switching station		PPL (100%)
b0908	Install motor operators at South Akron 230 kV		PPL (100%)
b0909	Convert Jenkins 230 kV yard into a 3-breaker ring bus		PPL (100%)
b0910	Install a second 230 kV line between Jenkins and Stanton		PPL (100%)
b0911	Install motor operators at Frackville 230 kV		PPL (100%)
b0912	Install 2, 10.8 MVAR capacitor banks at Scranton 69 kV		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0913	Extend Cando Tap to the Harwood-Jenkins #2 69 kV line		PPL (100%)
b0914	Build a 3rd 69 kV line from Harwood to Valmont Taps		PPL (100%)
b0915	Replace Walnut-Center City 69 kV cable		PPL (100%)
b0916	Reconductor Sunbury-Dalmatia 69 kV line		PPL (100%)
b1021	Install a new (#4) 138/69 kV transformer at Wescosville		PPL (100%)
b1196	Remove the Siegfried bus tie breaker and install a new breaker on the Martins Creek 230 kV line west bay to maintain two ties between the 230 kV buses		PPL (100%)
b1201	Rebuild the Hercules Tap to Double Circuit 69 kV		PPL (100%)
b1202	Mack-Macungie Double Tap, Single Feed Arrangement		PPL (100%)
b1203	Add the 2nd Circuit to the East Palmerton-Wagners-Lake Naomi 138/69 kV Tap		PPL (100%)
b1204	New Breinigsville 230-69 kV Substation		PPL (100%)
b1205	Siegfried-East Palmerton #1 69 kV Line- Install new 69 kV LSAB, Sectionalize, and Transfer Treichlers Substation		PPL (100%)



**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1206	Siegfried-Quarry #1 & #2 69 kV Lines- Rebuild 3.3 mi from Quarry Substation to Macada Taps	PPL (100%)
b1209	Convert Neffsville Taps from 69 kV to 138 kV Operation	PPL (100%)
b1210	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 1 – operate on the 69 kV system)	PPL (100%)
b1211	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 2 – operate on the 138 kV system)	PPL (100%)
b1212	New 138 kV Taps to Flory Mill 138/69 kV Substation	PPL (100%)
b1213	Convert East Petersburg Taps from 69 kV to 138 kV operation, install two 10.8 MVAR capacitor banks	PPL (100%)
b1214	Terminate South Manheim-Donegal #2 at South Manheim, Reduce South Manheim 69 kV Capacitor Bank, Resectionalize 69 kV	PPL (100%)
b1215	Reconductor and rebuild 16 miles of Peckville-Varden 69 kV line and 4 miles of Blooming Grove-Honesdale 69 kV line	PPL (100%)
b1216	Build approximately 2.5 miles of new 69 kV transmission line to provide a “double tap – single feed” connection to Kimbles 69/12 kV substation	PPL (100%)
b1217	Provide a “double tap – single feed” connection to Tafton 69/12 kV substation	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1524	Build a new Pocono 230/69 kV substation	PPL (100%)
b1524.1	Build approximately 14 miles new 230 kV South Pocono – North Pocono line	PPL (100%)
b1524.2	Install MOLSABs at Mt. Pocono substation	PPL (100%)
b1525	Build new West Pocono 230/69 kV Substation	PPL (100%)
b1525.1	Build approximately 14 miles new 230 kV Jenkins-West Pocono 230 kV Line	PPL (100%)
b1525.2	Install Jenkins 3E 230 kV circuit breaker	PPL (100%)
b1526	Install a new Honeybrook – Twin Valley 69/138 kV tie	PPL (100%)
b1527	Construct a new 230/69 kV North Lancaster substation. The sub will be supplied from the SAKR-BERK 230kV Line	PPL (100%)
b1527.1	Construct new 69/138 kV transmission from North Lancaster 230/69 kV sub to Brecknock and Honeybrook areas	PPL (100%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlerstown #1 & #2 69 kV lines at East Texas Substation	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1529	Add a double breaker 230 kV bay 3 at Hosensack		PPL (100%)
b1530	Replace Lock Haven 69kV ring bus with standard breaker and half design		PPL (100%)
b1532	Install new 32.4 MVAR capacitor bank at Sunbury		PPL (100%)
b1533	Rebuild Lycoming-Lock Haven #1 and Lycoming-Lock Haven #2 69kV lines		PPL (100%)
b1534	Rebuild 1.4 miles of the Sunbury-Milton 69kV		PPL (100%)
b1601	Re-configure the Breinigsville 500 kV substation with addition two 500 kV circuit breakers		AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)†
b1602	Re-configure the Elimsport 230 kV substation to breaker and half scheme and install 80 MVAR capacitor		PPL (100%)
b1740	Install a 90 MVAR cap bank on the Frackville 230 kV bus #207973		PPL (100%)
b1756	Install a 3rd West Shore 230/69 kV transformer		PPL (100%)

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**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1757	Install a 230 kV motor-operated air-break switch on the Clinton - Elimsport 230 kV line	PPL (100%)
b1758	Rebuild 1.65 miles of Columbia - Danville 69 kV line	PPL (100%)
b1759	Install a 69 kV 16.2 MVAR Cap at Milton substation	PPL (100%)
b1760	Install motor operated devices on the existing disconnect switches that are located on each side of all four 230 kV CBs at Stanton	PPL (100%)
b1761	Build a new Paupack - North 230 kV line (Approximately 21 miles)	PPL (100%)
b1762	Replace 3.7 miles of the existing 230 kV Blooming Grove - Peckville line by building 8.4 miles of new 230 kV circuit onto the Lackawanna - Hopatcong tower-line	PPL (100%)
b1763	Re-terminate the Peckville - Jackson and the Peckville - Varden 69 kV lines from Peckville into Lackawanna	PPL (100%)
b1764	Build a new 230-69 kV substations (Paupack)	PPL (100%)
b1765	Install a 16.2 MVAR capacitor bank at Bohemia 69-12 kV substation	PPL (100%)
b1766	Reconductor/rebuild 3.3 miles of the Siegfried - Quarry #1 and #2 lines	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1767	Install 6 motor-operated disconnect switches at Quarry substation		PPL (100%)
b1788	Install a new 500 kV circuit breaker at Wescosville		PPL (100%)
b1890	Add a second 230/69 kV transformer at North Pocono (NE/Pocono Reliability Project)		PPL (100%)
b1891	Build a new 230/138 kV Yard at Lackawanna (138 kV conversion from Lackawanna to Jenkins)		PPL (100%)
b1892	Rebuild the Throop Taps for 138 kV operation (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1893	Swap the Staton - Old Forge and Stanton - Brookside 69 kV circuits at Stanton (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1894	Rebuild and re-conductor 2.5 miles of the Stanton - Avoca 69 kV line		PPL (100%)
b1895	Rebuild and re-conductor 4.9 miles of the Stanton - Providence #1 69 kV line		PPL (100%)
b1896	Install a second 230/138 kV transformer and expand the 138 kV yard at Monroe		PPL (100%)
b1897	Build a new 230/138 kV substation at Jenkins (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1898	Install a 69 kV Tie Line between Richfield and Dalmatia substations		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b2004	Replace the CTs and switch in South Akron Bay 4 to increase the rating		PPL (100%)
b2005	Replace the CTs and switch in SAKR Bay 3 to increase the rating of the Millwood-South Akron 230 kV Line and of the rating in Bay 3		PPL (100%)
b2006	Install North Lancaster 500/230 kV substation (below 500 kV portion)		AEC (1.10%) / ECP** (0.37%) / HTP (0.37%) / JCPL (9.61%) / ME (19.42%) / Neptune* (0.75%) / PECO (6.01%) / PPL (50.57%) / PSEG (11.35%) / RE (0.45%)
b2006.1	Install North Lancaster 500/230 kV substation (500 kV portion)		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>BGE (16.09%) / ME (21.47%) / PPL (62.44%)</u>
b2007	Install a 90 MVAR capacitor bank at the Frackville 230 kV Substation		PPL (100%)
b2158	Install 10.8 MVAR capacitor at West Carlisle 69/12 kV substation		PPL (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## SCHEDULE 12 – APPENDIX

### (10) Potomac Electric Power Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0146	Installation of (2) new 230 kV circuit breakers at Quince Orchard substation on circuits 23028 and 23029	PEPCO (100%)
b0219	Install two new 230 kV circuits between Palmers Corner and Blue Plains	PEPCO (100%)
b0228	Upgrade Burtonsville – Sandy Springs 230 kV circuit	PEPCO (100%)
b0238.1	Modify Dickerson Station H 230 kV	PEPCO (100%)
b0251	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0252	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0288	Brighton Substation – add 2 <sup>nd</sup> 1000 MVA 500/230 kV transformer, 2 500 kV circuit breakers and miscellaneous bus work	BGE (19.33%) / Dominion (17%) / PEPCO (63.67%)
b0319	Add a second 1000 MVA Bruches Hill 500/230 kV transformer	PEPCO (100%)
b0366	Install a 4 <sup>th</sup> Ritchie 230/69 kV transformer	PEPCO (100%)
b0367.1	Reconductor circuit “23035” for Dickerson – Quince Orchard 230 kV	AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.

## Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0367.2	Reconductor circuit "23033" for Dickerson – Quince Orchard 230 kV		AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)
b0375	Install 0.5% reactor at Dickerson on the Pleasant View – Dickerson 230 kV circuit		AEC (1.02%) / BGE (25.42%) / DPL (2.97%) / ME (1.72%) / PECO (3.47%) / PEPCO (65.40%)
b0467.1	Reconductor the Dickerson – Pleasant View 230 kV circuit		AEC (1.75%) / APS (19.66%) / BGE (22.09%) / ConEd (0.18%) / DPL (3.69%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.53%) / PEPCO (41.78%) / PPL (2.07%)
b0478	Reconductor the four circuits from Burches Hill to Palmers Corner		APS (1.68%) / BGE (1.83%) / PEPCO (96.49%)
b0496	Replace existing 500/230 kV transformer at Brighton		APS (5.67%) / BGE (29.68%) / Dominion (10.91%) / PEPCO (53.74%)
b0499	Install third Burches Hill 500/230 kV transformer		APS (3.54%) / BGE (7.31%) / PEPCO (89.15%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

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The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.



**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.7	Advance n0772 (Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.8	Advance n0773 (Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

\* Neptune Regional Transmission System, LLC

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.9	Advance n0774 (Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.10	Advance n0775 (Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.11	Advance n0776 (Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.12	Advance n0777 (Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.13	Advance n0778 (Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.14	Advance n0779 (Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

\* Neptune Regional Transmission System, LLC

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.15	Advance n0780 (Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.16	Advance n0781 (Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C

\*\*\* Hudson Transmission Partners, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.17	Advance n0782 (Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.18	Advance n0783 (Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.19	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.20	Advance n0785 (Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

\* Neptune Regional Transmission System, LLC

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.21	Advance n0786 (Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.22	Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.23	Advance n0788 (Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.24	Advance n0789 (Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.25	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.26	Advance n0791 (Replace Chalk Point 230 Kv breaker (4C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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**Potomac Electric Power Company (cont.)**

<b>Required Transmission Enhancements</b>	<b>Annual Revenue Requirement</b>	<b>Responsible Customer(s)</b>
b0512.27	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.28	Advance n0793 (Replace Chalk Point 230 Kv breaker (6C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.29	Advance n0794 (Replace Chalk Point 230 Kv breaker (7C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0526	Build two Ritchie – Benning Station A 230 kV lines	AEC (0.77%) / BGE (16.76%) / DPL (1.22%) / JCPL (1.39%) / ME (0.59%) / Neptune* (0.13%) / PECO (2.10%) / PEPCO (74.86%) / PSEG (2.10%) / RE (0.08%)
b0561	Install 300 MVAR capacitor at Dickerson Station “D” 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0562	Install 500 MVAR capacitor at Brighton 230 kV substation		AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0637	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0638	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0639	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0640	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0641	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0642	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0643	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0644	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0645	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0646	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0647	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0648	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0649	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0701	Expand Benning 230 kV station, add a new 250 MVA 230/69 kV transformer at Benning Station 'A', new 115 kV Benning switching station		BGE (30.57%) / PEPCO (69.43%)
b0702	Add a second 50 MVAR 230 kV shunt reactor at the Benning 230 kV substation		PEPCO (100%)
b0720	Upgrade terminal equipment on both lines		PEPCO (100%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0721	Upgrade Oak Grove – Ritchie 23061 230 kV line	PEPCO (100%)
b0722	Upgrade Oak Grove – Ritchie 23058 230 kV line	PEPCO (100%)
b0723	Upgrade Oak Grove – Ritchie 23059 230 kV line	PEPCO (100%)
b0724	Upgrade Oak Grove – Ritchie 23060 230 kV line	PEPCO (100%)
b0730	Add slow oil circulation to the four Bells Mill Road – Bethesda 138 kV lines, add slow oil circulation to the two Buzzard Point – Southwest 138 kV lines; increasing the thermal ratings of these six lines allows for greater adjustment of the O Street phase shifters	PEPCO (100%)
b0731	Implement an SPS to automatically shed load on the 34 kV Bells Mill Road bus for this N-2 condition. The SPS will be in effect for 2013 and 2014 until a third Bells Mill 230/34 kV is placed in-service in 2015	PEPCO (100%)
b0746	Upgrade circuit for 3,000 amps using the ACCR	AEC (0.73%) / BGE (31.05%) / DPL (1.45%) / PECO (2.46%) / PEPCO (62.88%) / PPL (1.43%)
b0747	Upgrade terminal equipment on both lines: Quince Orchard - Bells Mill 230 kV (030) and (028)	PEPCO (100%)
b0802	Advance n0259 (Replace Dickerson Station H Circuit Breaker 412A)	PEPCO (100%)
b0803	Advance n0260 (Replace Dickerson Station H Circuit Breaker 42A)	PEPCO (100%)
b0804	Advance n0261 (Replace Dickerson Station H Circuit Breaker 42C)	PEPCO (100%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0805	Advance n0262 (Replace Dickerson Station H Circuit Breaker 43A)		PEPCO (100%)
b0806	Advance n0264 (Replace Dickerson Station H Circuit Breaker 44A)		PEPCO (100%)
b0809	Advance n0267 (Replace Dickerson Station H Circuit Breaker 45B)		PEPCO (100%)
b0810	Advance n0270 (Replace Dickerson Station H Circuit Breaker 47A)		PEPCO (100%)
b0811	Advance n0726 (Replace Dickerson Station H Circuit Breaker SPARE )		PEPCO (100%)
b0845	Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker		PEPCO (100%)
b0846	Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker		PEPCO (100%)
b0847	Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker		PEPCO (100%)
b0848	Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker		PEPCO (100%)
b0849	Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker		PEPCO (100%)
b0850	Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker		PEPCO (100%)
b0851	Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker		PEPCO (100%)
b0852	Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker		PEPCO (100%)
b0853	Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker		PEPCO (100%)
b0854	Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker		PEPCO (100%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0855	Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker		PEPCO (100%)
b0856	Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker		PEPCO (100%)
b0857	Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker		PEPCO (100%)
b0858	Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker		PEPCO (100%)
b0859	Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker		PEPCO (100%)
b0860	Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker		PEPCO (100%)
b0861	Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker		PEPCO (100%)
b0862	Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker		PEPCO (100%)
b0863	Replace Chalk Point 230 kV breaker (1C) with 80 kA breaker		PEPCO (100%)
b1104	Replace Burtonsville 230 kV breaker '1C'		PEPCO (100%)
b1105	Replace Burtonsville 230 kV breaker '2C'		PEPCO (100%)
b1106	Replace Burtonsville 230 kV breaker '3C'		PEPCO (100%)
b1107	Replace Burtonsville 230 kV breaker '4C'		PEPCO (100%)
b1125	Convert the 138 kV line from Buzzard 138 - Ritchie 851 to a 230 kV line and Remove 230/138 kV Transformer at Ritchie and install a spare 230/138 kV transformer at Buzzard Pt		APS (4.74%) / PEPCO (95.26%)
b1126	Upgrade the 230 kV line from Buzzard 016 – Ritchie 059		APS (4.74%) / PEPCO (95.26%)



**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1592	Reconductor the Oak Grove – Bowie 230 kV circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations	AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1593	Reconductor the Bowie - Burtonsville 230 kV circuit and upgrade terminal equipments at Bowie and Burtonsville 230 kV substations	AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1594	Reconductor the Oak Grove – Bowie 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations	AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1595	Reconductor the Bowie – Burtonsville 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Burtonsville 230 kV substations	AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1596	Reconductor the Dickerson station “H” – Quince Orchard 230 kV ‘23032’ circuit and upgrade terminal equipments at Dickerson station “H” and Quince Orchard 230 kV substations	AEC (0.80%) / BGE (33.68%) / DPL (2.09%) / PECO (3.07%) / PEPCO (60.36%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1597	Reconductor the Oak Grove - Aquasco 230 kV '23062' circuit and upgrade terminal equipments at Oak Grove and Aquasco 230 kV substations		AEC (1.44%) / BGE (48.60%) / DPL (2.52%) / PECO (5.00%) / PEPCO (42.44%)
b2008	Reconductor feeder 23032 and 23034 to high temp. conductor (10 miles)		BGE (33.05%) / DPL (1.38%) / PECO (1.35%) / PEPCO (64.22%) /
b2136	Reconductor the Morgantown - V3-017 230 kV '23086' circuit and replace terminal equipments at Morgantown		PEPCO (100%)
b2137	Reconductor the Morgantown - Talbert 230 kV '23085' circuit and replace terminal equipment at Morgantown		PEPCO (100%)
b2138	Replace terminal equipments at Hawkins 230 kV substation		PEPCO (100%)

## SCHEDULE 12 – APPENDIX

### (12) Public Service Electric and Gas Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0025	Convert the Bergen-Leonia 138 Kv circuit to 230 kV circuit.	PSEG (100%)
b0090	Add 150 MVAR capacitor at Camden 230 kV	PSEG (100%)
b0121	Add 150 MVAR capacitor at Aldene 230 kV	PSEG (100%)
b0122	Bypass the Essex 138 kV series reactors	PSEG (100%)
b0125	Add Special Protection Scheme at Bridgewater to automatically open 230 kV breaker for outage of Branchburg – Deans 500 kV and Deans 500/230 kV #1 transformer	PSEG (100%)
b0126	Replace wavetrap on Branchburg – Flagtown 230 kV	PSEG (100%)
b0127	Replace terminal equipment to increase Brunswick – Adams – Bennetts Lane 230 kV to conductor rating	PSEG (100%)
b0129	Replace wavetrap on Flagtown – Somerville 230 kV	PSEG (100%)
b0130	Replace all derated Branchburg 500/230 kV transformers	AEC (1.36%) / ConEd (0.26%) / JCPL (47.63%) / PSEG (50.75%)
b0134	Upgrade or Retension PSEG portion of Kittatinny – Newton 230 kV circuit	JCPL (51.11%) / PSEG (45.96%) / RE (2.93%)

The Annual Revenue Requirement for all Public Service Electric and Gas Company Projects (Required Transmission Enhancements) in this Section 12 shall be as specified in Attachment 7 of Attachment H-10A and under the procedures detailed in Attachment H-10B.

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0145	Build new Essex – Aldene 230 kV cable connected through a phase angle regulator at Essex	PSEG (21.78%) / JCPL (73.45%) / RE (4.77%)
b0157	Add 100MVAR capacitor at West Orange 138kV substation	PSEG (100%)
b0158	Close the Sunnymeade "C" and "F" bus tie	PSEG (100%)
b0159	Make the Bayonne reactor permanent installation	PSEG (100%)
b0160	Relocate the X-2250 circuit from Hudson 1-6 bus to Hudson 7-12 bus	PSEG (100%)
b0161	Install 230/138kV transformer at Metuchen substation	PSEG (99.80%) / RE (0.20%)
b0162	Upgrade the Edison – Meadow Rd 138kV “Q” circuit	PSEG (100%)
b0163	Upgrade the Edison – Meadow Rd 138kV “R” circuit	PSEG (100%)
b0169	Build a new 230 kV section from Branchburg – Flagtown and move the Flagtown – Somerville 230 kV circuit to the new section	AEC (1.70%) / ConEd (1.06%) / JCPL (25.66%) / Neptune* (10.51%) / PSEG (58.96%) / ECP** (2.11%)
b0170	Reconductor the Flagtown-Somerville-Bridgewater 230 kV circuit with 1590 ACSS	JCLP (42.95%) / Neptune* (17.90%) / PSEG (38.36%) / RE (0.79%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0172.2	Replace wave trap at Branchburg 500kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (5.23%) / ECP (1.70%) / HTP (1.45%) / JCPL (30.06%) / NEPTUNE (4.42%) / PECO (8.85%) / PSEG (46.40%) / RE (1.89%)</p>
b0184	Replace Hudson 230kV circuit breakers #1-2	PSEG (100%)
b0185	Replace Deans 230kV circuit breakers #9-10	PSEG (100%)
b0186	Replace Essex 230kV circuit breaker #5-6	PSEG (100%)
b1082	Install 230/138 kV transformer at Bergen substation	PENELEC (16.52%) / PSEG (80.29%) / RE (3.19%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0201	Branchburg substation: replace wave trap on Branchburg – Readington 230 kV circuit	PSEG (100%)
b0213.1	Replace New Freedom 230 kV breaker BS2-6	PSEG (100%)
b0213.3	Replace New Freedom 230 kV breaker BS2-8	PSEG (100%)
b0274	Replace both 230/138 kV transformers at Roseland	ConEd (8.48%) / PSEG (88.56%) / ECP** (2.96%)
b0275	Upgrade the two 138 kV circuits between Roseland and West Orange	PSEG (100%)
b0278	Install 228 MVAR capacitor at Roseland 230 kV substation	PSEG (100%)
b0290	Install 400 MVAR capacitor in the Branchburg 500 kV vicinity	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.23%) / ECP (1.70%) / HTP (1.45%) / JCPL (30.06%) / NEPTUNE (4.42%) / PECO (8.85%) / PSEG (46.40%) / RE (1.89%)</u></p>
b0358	Reconductor the PSEG portion of Buckingham – Pleasant Valley 230 kV, replace wave trap and metering transformer	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0368	Reconductor Tosco – G22_MTX 230 kV circuit with 1033 bundled ACSS	PSEG (100%)
b0371	Make the Metuchen 138 kV bus solid and upgrade 6 breakers at the Metuchen substation	PSEG (100%)
b0372	Make the Athenia 138 kV bus solid and upgrade 2 breakers at the Athenia substation	PSEG (100%)
b0395	Replace Hudson 230 kV breaker BS4-5	PSEG (100%)
b0396	Replace Hudson 230 kV breaker BS1-6	PSEG (100%)
b0397	Replace Hudson 230 kV breaker BS3-4	PSEG (100%)
b0398	Replace Hudson 230 kV breaker BS5-6	PSEG (100%)
b0401.1	Replace Roseland 230 kV breaker BS6-7	PSEG (100%)
b0401.2	Replace Roseland 138 kV breaker O-1315	PSEG (100%)
b0401.3	Replace Roseland 138 kV breaker S-1319	PSEG (100%)
b0401.4	Replace Roseland 138 kV breaker T-1320	PSEG (100%)
b0401.5	Replace Roseland 138 kV breaker G-1307	PSEG (100%)
b0401.6	Replace Roseland 138 kV breaker P-1316	PSEG (100%)
b0401.7	Replace Roseland 138 kV breaker 220-4	PSEG (100%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0401.8	Replace W. Orange 138 kV breaker 132-4	PSEG (100%)
b0411	Install 4 <sup>th</sup> 500/230 kV transformer at New Freedom	AEC (47.01%) / JCPL (7.04%) / Neptune* (0.28%) / PECO (23.36%) / PSEG (22.31%)
b0423	Reconductor Readington (2555) – Branchburg (4962) 230 kV circuit w/1590 ACSS	PSEG (100%)
b0424	Replace Readington wavetrap on Readington (2555) – Roseland (5017) 230 kV circuit	PSEG (100%)
b0425	Reconductor Linden (4996) – Tosco (5190) 230 kV circuit w/1590 ACSS (Assumes operating at 220 degrees C)	PSEG (100%)
b0426	Reconductor Tosco (5190) – G22_MTX5 (90220) 230 kV circuit w/1590 ACSS (Assumes operation at 220 degrees C)	PSEG (100%)
b0427	Reconductor Athenia (4954) – Saddle Brook (5020) 230 kV circuit river section	PSEG (100%)
b0428	Replace Roseland wavetrap on Roseland (5019) – West Caldwell “G” (5089) 138 kV circuit	PSEG (100%)
b0429	Reconductor Kittatinny (2553) – Newton (2535) 230 kV circuit w/1590 ACSS	JCPL (41.91%) / Neptune* (3.59%) / PSEG (50.59%) / RE (2.23%) / ECP** (1.68%)
b0439	Spare Deans 500/230 kV transformer	PSEG (100%)
b0446.1	Upgrade Bayway 138 kV breaker #2-3	PSEG (100%)
b0446.2	Upgrade Bayway 138 kV breaker #3-4	PSEG (100%)



## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0446.3	Upgrade Bayway 138 kV breaker #6-7	PSEG (100%)
b0446.4	Upgrade the breaker associated with TX 132-5 on Linden 138 kV	PSEG (100%)
b0470	Install 138 kV breaker at Roseland and close the Roseland 138 kV buses	PSEG (100%)
b0471	Replace the wave traps at both Lawrence and Pleasant Valley on the Lawrence – Pleasant Vallen 230 kV circuit	PSEG (100%)
b0472	Increase the emergency rating of Saddle Brook – Athenia 230 kV by 25% by adding forced cooling	ConEd (1.64%) / ECP (2.03%) / PSEG (92.86%) / RE (3.47%)
b0473	Move the 150 MVAR mobile capacitor from Aldene 230 kV to Lawrence 230 kV substation	PSEG (100%)
b0489	Build new 500 kV transmission facilities from Pennsylvania – New Jersey border at Bushkill to Roseland	<u><b>Load-Ratio Share Allocation:</b></u> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)†
		<u><b>DFAX Allocation:</b></u> ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)
b489.1	Replace Athenia 230 kV breaker 31H	PSEG (100%)

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† Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

†† Cost allocations associated with below 500 kV elements of the project

# Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b489.2	Replace Bergen 230 kV breaker 10H	PSEG (100%)
b489.3	Replace Saddlebrook 230 kV breaker 21P	PSEG (100%)
b0489.4	Install two Roseland 500/230 kV transformers as part of the Susquehanna – Roseland 500 kV project	AEC (5.07%) / ComEd (0.29%) / ConEd (0.48%) / Dayton (0.03%) / DPL (1.75%) / JCPL (32.57%) / Neptune* (6.29%) / PECO (9.99%) / PENELEC (0.56%) / ECP** (0.95%) / PSEG (40.51%) / RE (1.51%) ††
b0489.5	Replace Roseland 230 kV breaker '42H' with 80 kA	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)</u>
b0489.6	Replace Roseland 230 kV breaker '51H' with 80 kA	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)</u>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.7	Replace Roseland 230 kV breaker '71H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%)  / ConEd (0.55%) / Dayton  (2.02%) / DEOK (3.15%) / DL  (1.72%) / DPL (2.53%) /  Dominion (13.30%) / EKPC  (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.72%) / HTP (3.41%) /</u>  <u>JCPL (37.79%) / NEPTUNE</u>  <u>(3.42%) / PSEG (50.60%) / RE</u>  <u>(2.06%)</u></p>
b0489.8	Replace Roseland 230 kV breaker '31H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%)  / ConEd (0.55%) / Dayton  (2.02%) / DEOK (3.15%) / DL  (1.72%) / DPL (2.53%) /  Dominion (13.30%) / EKPC  (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.72%) / HTP (3.41%) /</u>  <u>JCPL (37.79%) / NEPTUNE</u>  <u>(3.42%) / PSEG (50.60%) / RE</u>  <u>(2.06%)</u></p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.9	Replace Roseland 230 kV breaker '11H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)</p>
b0489.10	Replace Roseland 230 kV breaker '21H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.11	Replace Roseland 230 kV breaker '32H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.72%) / HTP (3.41%) / JCPL</u>  <u>(37.79%) / NEPTUNE (3.42%) /</u>  <u>PSEG (50.60%) / RE (2.06%)</u></p>
b0489.12	Replace Roseland 230 kV breaker '12H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.72%) / HTP (3.41%) / JCPL</u>  <u>(37.79%) / NEPTUNE (3.42%) /</u>  <u>PSEG (50.60%) / RE (2.06%)</u></p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.13	Replace Roseland 230 kV breaker '52H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p>
		<p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.72%) / HTP (3.41%) / JCPL</u>  <u>(37.79%) / NEPTUNE (3.42%) /</u>  <u>PSEG (50.60%) / RE (2.06%)</u></p>
b0489.14	Replace Roseland 230 kV breaker '41H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p>
		<p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.72%) / HTP (3.41%) / JCPL</u>  <u>(37.79%) / NEPTUNE (3.42%) /</u>  <u>PSEG (50.60%) / RE (2.06%)</u></p>

**Public Service Electric and Gas Company (cont.)**

<b><u>Required Transmission Enhancements</u></b>	<b><u>Annual Revenue Requirement</u></b>	<b><u>Responsible Customer(s)</u></b>
b0489.15	Replace Roseland 230 kV breaker '72H'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>ECP (2.72%) / HTP (3.41%) / JCPL</u> <u>(37.79%) / NEPTUNE (3.42%) /</u> <u>PSEG (50.60%) / RE (2.06%)</u>

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0498	Loop the 5021 circuit into New Freedom 500 kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (14.30%) / ECP (1.14%) / HTP (0.98%) / JCPL (31.36%) / NEPTUNE (3.35%) / PSEG (46.96%) / RE (1.91%)</u></p>
b0498.1	Upgrade the 20H circuit breaker	PSEG (100%)
b0498.2	Upgrade the 22H circuit breaker	PSEG (100%)
b0498.3	Upgrade the 30H circuit breaker	PSEG (100%)
b0498.4	Upgrade the 32H circuit breaker	PSEG (100%)
b0498.5	Upgrade the 40H circuit breaker	PSEG (100%)
b0498.6	Upgrade the 42H circuit breaker	PSEG (100%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0565	Install 100 MVAR capacitor at Cox's Corner 230 kV substation	PSEG (100%)
b0578	Replace Essex 138 kV breaker 4LM (C1355 line to ECRRF)	PSEG (100%)
b0579	Replace Essex 138 kV breaker 1LM (220-1 TX)	PSEG (100%)
b0580	Replace Essex 138 kV breaker 1BM (BS1-3 tie)	PSEG (100%)
b0581	Replace Essex 138 kV breaker 2BM (BS3-4 tie)	PSEG (100%)
b0582	Replace Linden 138 kV breaker 3 (132-7 TX)	PSEG (100%)
b0592	Replace Metuchen 138 kV breaker '2-2 Transfer'	PSEG (100%)
b0664	Reconductor with 2x1033 ACSS conductor	JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0665	Reconductor with 2x1033 ACSS conductor	JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0668	Reconductor with 2x1033 ACSS conductor	JCPL (39.41%) / NEPTUNE* (20.38%) / PSEG (38.76%) / RE (1.45%)
b0671	Replace terminal equipment at both ends of line	PSEG (100%)
b0743	Add a bus tie breaker at Roseland 138 kV	PSEG (100%)
b0812	Increase operating temperature on line for one year to get 925E MVA rating	PSEG (100%)
b0813	Reconductor Hudson – South Waterfront 230 kV circuit	BGE (1.25%) / JCPL (9.92%) / NEPTUNE* (0.87%) / PEPCO (1.11%) / PSEG (83.73%) / RE (3.12%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814	New Essex – Kearney 138 kV circuit and Kearney 138 kV bus tie	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.1	Replace Kearny 138 kV breaker '1-SHT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.2	Replace Kearny 138 kV breaker '15HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.3	Replace Kearny 138 kV breaker '14HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.4	Replace Kearny 138 kV breaker '10HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.5	Replace Kearny 138 kV breaker '2HT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.6	Replace Kearny 138 kV breaker '22HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.7	Replace Kearny 138 kV breaker '4HT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.8	Replace Kearny 138 kV breaker '25HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.9	Replace Essex 138 kV breaker '2LM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.10	Replace Essex 138 kV breaker '1BT' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.11	Replace Essex 138 kV breaker '2PM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.12	Replace Marion 138 kV breaker '2HM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.13	Replace Marion 138 kV breaker '2LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.14	Replace Marion 138 kV breaker '1LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.15	Replace Marion 138 kV breaker '6PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.16	Replace Marion 138 kV breaker '3PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.17	Replace Marion 138 kV breaker '4LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.18	Replace Marion 138 kV breaker '3LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.19	Replace Marion 138 kV breaker '1HM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.20	Replace Marion 138 kV breaker '2PM3' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.21	Replace Marion 138 kV breaker '2PM1' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.22	Replace ECRR 138 kV breaker '903'	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.23	Replace Foundry 138 kV breaker '21P'	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.24	Change the contact parting time on Essex 138 kV breaker '3LM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.25	Change the contact parting time on Essex 138 kV breaker '2BM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.26	Change the contact parting time on Essex 138 kV breaker '1BM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.27	Change the contact parting time on Essex 138 kV breaker '3PM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.28	Change the contact parting time on Essex 138 kV breaker '4LM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.29	Change the contact parting time on Essex 138 kV breaker '1PM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.30	Change the contact parting time on Essex 138 kV breaker '1LM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0829	Build Branchburg to Roseland 500 kV circuit as part of Branchburg – Hudson 500 kV project	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0829.6	Replace Branchburg 500 kV breaker 91X	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.08%) / RE (3.92%)</p>
b0829.9	Replace Branchburg 230 kV breaker 102H	PSEG (100%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0829.11	Replace Branchburg 230 kV breaker 32H		PSEG (100%)
b0829.12	Replace Branchburg 230 kV breaker 52H		PSEG (100%)
b0830	Build Roseland - Hudson 500 kV circuit as part of Branchburg – Hudson 500 kV project		AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0830.1	Replace Roseland 230 kV breaker '82H' with 80 kA		PSEG (100%)
b0830.2	Replace Roseland 230 kV breaker '91H' with 80 kA		PSEG (100%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0830.3	Replace Roseland 230 kV breaker '22H' with 80 kA	PSEG (100%)
b0831	Replace 138/13 kV transformers with 230/13 kV units as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0832	Build Hudson 500 kV switching station as part of Branchburg – Hudson 500 kV project	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0833	Build Roseland 500 kV switching station as part of Branchburg – Hudson 500 kV project	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0834	Convert the E-1305/F-1306 to one 230 kV circuit as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0835	Build Hudson 230 kV transmission lines as part of Roseland – Hudson 500 kV project as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0836	Install transformation at new Hudson 500 kV switching station and perform Hudson 230 kV and 345 kV station work as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0882	Replace Hudson 230 kV breaker 1HA with 80 kA	PSEG (100%)
b0883	Replace Hudson 230 kV breaker 2HA with 80 kA	PSEG (100%)
b0884	Replace Hudson 230 kV breaker 3HB with 80 kA	PSEG (100%)
b0885	Replace Hudson 230 kV breaker 4HA with 80 kA	PSEG (100%)
b0886	Replace Hudson 230 kV breaker 4HB with 80 kA	PSEG (100%)
b0889	Replace Bergen 230 kV breaker '21H'	PSEG (100%)
b0890	Upgrade New Freedom 230 kV breaker '21H'	PSEG (100%)
b0891	Upgrade New Freedom 230 kV breaker '31H'	PSEG (100%)
b0899	Replace ECRR 138 kV breaker 901	PSEG (100%)
b0900	Replace ECRR 138 kV breaker 902	PSEG (100%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1013	Replace Linden 138 kV breaker '7PB'		PSEG (100%)
b1017	Reconductor South Mahwah - Waldwick 345 kV J-3410 circuit		ConEd (49.36%) / JCPL (14.69%) / NEPTUNE* (1.39%) / PSEG (32.84%) / RE (1.28%) / ECP** (0.44%)
b1018	Reconductor South Mahwah - Waldwick 345 kV K-3411 circuit		ConEd (49.38%) / JCPL (14.77%) / NEPTUNE* (1.39%) / PSEG (32.74%) / RE (1.28%) / ECP** (0.44%)
b1019.1	Replace wave trap, line disconnect and ground switch at Roseland on the F-2206 circuit		PSEG (100%)
b1019.2	Replace wave trap, line disconnect and ground switch at Roseland on the B-2258 circuit		PSEG (100%)
b1019.3	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.4	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the B-2258 circuit		PSEG (100%)
b1019.5	Replace wave trap, line disconnect and ground switch at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.6	Replace line disconnect and ground switch at Cedar Grove on the K-2263 circuit		PSEG (100%)
b1019.7	Replace 2-4 and 4-5 section disconnect and ground switches at Clifton on the B-2258 circuit		PSEG (100%)
b1019.8	Replace 1-2 and 2-3 section disconnect and ground switches at Clifton on the K-2263 circuit		PSEG (100%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1019.9	Replace line, ground, 230 kV main bus disconnects at Athenia on the B-2258 circuit	PSEG (100%)
b1019.10	Replace wave trap, line, ground 230 kV breaker disconnect and 230 kV main bus disconnects at Athenia on the K-2263 circuit	PSEG (100%)
b1082.1	Replace Bergen 138 kV breaker '30P' with 80 kA	PSEG (100%)
b1082.2	Replace Bergen 138 kV breaker '80P' with 80 kA	PSEG (100%)
b1082.3	Replace Bergen 138 kV breaker '70P' with 80 kA	PSEG (100%)
b1082.4	Replace Bergen 138 kV breaker '90P' with 63 kA	PSEG (100%)
b1082.5	Replace Bergen 138 kV breaker '50P' with 63 kA	PSEG (100%)
b1082.6	Replace Bergen 230 kV breaker '12H' with 80 kA	PSEG (100%)
b1082.7	Replace Bergen 230 kV breaker '21H' with 80 kA	PSEG (100%)
b1082.8	Replace Bergen 230 kV breaker '11H' with 80 kA	PSEG (100%)
b1082.9	Replace Bergen 230 kV breaker '20H' with 80 kA	PSEG (100%)
b1098	Re-configure the Bayway 138 kV substation and install three new 138 kV breakers	PSEG (100%)
b1099	Build a new 230 kV substation by tapping the Aldene – Essex circuit and install three 230/26 kV transformers, and serve some of the Newark area load from the new station	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1100	Build a new 138 kV circuit from Bayonne to Marion		PSEG (100%)
b1101	Re-configure the Cedar Grove substation with breaker and half scheme and build a new 69 kV circuit from Cedar Grove to Hinchman		PSEG (100%)
b1154	Convert the West Orange 138 kV substation, the two Roseland – West Orange 138 kV circuits, and the Roseland – Sewaren 138 kV circuit from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1155	Build a new 230 kV circuit from Branchburg to Middlesex Sw. Rack. Build a new 230 kV substation at Middlesex		JCPL (4.61%) / PSEG (91.75%) / RE (3.64%)
b1155.3	Replace Branchburg 230 kV breaker '81H' with 63 kA		PSEG (100%)
b1155.4	Replace Branchburg 230 kV breaker '72H' with 63 kA		PSEG (100%)
b1155.5	Replace Branchburg 230 kV breaker '61H' with 63 kA		PSEG (100%)
b1155.6	Replace Branchburg 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156	Convert the Burlington, Camden, and Cuthbert Blvd 138 kV substations, the 138 kV circuits from Burlington to Camden, and the 138 kV circuit from Camden to Cuthbert Blvd. from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1156.13	Replace Camden 230 kV breaker '22H' with 80 kA		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1156.14	Replace Camden 230 kV breaker '32H' with 80 kA		PSEG (100%)
b1156.15	Replace Camden 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1156.16	Replace New Freedom 230 kV breaker '50H' with 63 kA		PSEG (100%)
b1156.17	Replace New Freedom 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156.18	Replace New Freedom 230 kV breaker '51H' with 63 kA		PSEG (100%)
b1156.19	Rebuild Camden 230 kV to 80 kA		PSEG (100%)
b1156.20	Rebuild Burlington 230 kV to 80 kA		PSEG (100%)
b1197.1	Reconductor the PSEG portion of the Burlington – Croydon circuit with 1590 ACSS		PSEG (100%)
b1228	Re-configure the Lawrence 230 kV substation to breaker and half		HTP (0.14%) / ECP (0.22%) / PSEG (95.83%) / RE (3.81%)
b1255	Build a new 69 kV substation (Ridge Road) and build new 69 kV circuits from Montgomery – Ridge Road – Penns Neck/Dow Jones		PSEG (96.18%) / RE (3.82%)
b1304.1	Convert the existing 'D1304' and 'G1307' 138 kV circuits between Roseland – Kearny – Hudson to 230 kV operation		AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1304.2	Expand existing Bergen 230 kV substation and reconfigure the Athenia 230 kV substation to breaker and a half scheme	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.3	Build second 230 kV underground cable from Bergen to Athenia	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.4	Build second 230 kV underground cable from Hudson to South Waterfront	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.5	Replace Athenia 230 kV breaker '21H' with 80 kA	PSEG (100%)
b1304.6	Replace Athenia 230 kV breaker '41H' with 80 kA	PSEG (100%)
b1304.7	Replace South Waterfront 230 kV breaker '12H' with 80 kA	PSEG (100%)
b1304.8	Replace South Waterfront 230 kV breaker '22H' with 80 kA	PSEG (100%)
b1304.9	Replace South Waterfront 230 kV breaker '32H' with 80 kA	PSEG (100%)
b1304.10	Replace South Waterfront 230 kV breaker '52H' with 80 kA	PSEG (100%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.11	Replace South Waterfront 230 kV breaker '62H' with 80 kA		PSEG (100%)
b1304.12	Replace South Waterfront 230 kV breaker '72H' with 80 kA		PSEG (100%)
b1304.13	Replace South Waterfront 230 kV breaker '82H' with 80 kA		PSEG (100%)
b1304.14	Replace Essex 230 kV breaker '20H' with 80 kA		PSEG (100%)
b1304.15	Replace Essex 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.16	Replace Essex 230 kV breaker '10H' with 80 kA		PSEG (100%)
b1304.17	Replace Essex 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1304.18	Replace Essex 230 kV breaker '11HL' with 80 kA		PSEG (100%)
b1304.19	Replace Newport R 230 kV breaker '23H' with 63 kA		PSEG (100%)
b1304.20	Rebuild Athenia 230 kV substation to 80 kA		PSEG (100%)
b1304.21	Rebuild Bergen 230 kV substation to 80 kA		PSEG (100%)
b1398	Build two new parallel underground circuits from Gloucester to Camden		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.1	Install shunt reactor at Gloucester to offset cable charging		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.2	Reconfigure the Cuthbert station to breaker and a half scheme	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.3	Build a second 230 kV parallel overhead circuit from Mickelton – Gloucester	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.4	Reconductor the existing Mickleton – Gloucester 230 kV circuit (PSEG portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.7	Reconductor the Camden – Richmond 230 kV circuit (PSEG portion) and upgrade terminal equipments at Camden substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.15	Replace Gloucester 230 kV breaker '21H' with 63 kA	PSEG (100%)
b1398.16	Replace Gloucester 230 kV breaker '51H' with 63 kA	PSEG (100%)
b1398.17	Replace Gloucester 230 kV breaker '56H' with 63 kA	PSEG (100%)
b1398.18	Replace Gloucester 230 kV breaker '26H' with 63 kA	PSEG (100%)
b1398.19	Replace Gloucester 230 kV breaker '71H' with 63 kA	PSEG (100%)
b1399	Convert the 138 kV path from Aldene – Springfield Rd. – West Orange to 230 kV	PSEG (96.18%) / RE (3.82%)
b1400	Install 230 kV circuit breakers at Bennetts Ln. “F” and “X” buses	PSEG (100%)

\* Neptune Regional Transmission System, LLC

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1410	Replace Salem 500 kV breaker '11X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%)  / APS (5.89%) / ATSI (7.59%)  / BGE (4.12%) / ComEd  (12.38%) / ConEd (0.55%) /  Dayton (2.02%) / DEOK  (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP***  (0.20%) / JCPL (3.57%) / ME  (1.72%) / NEPTUNE* (0.41%)  / PECO (4.97%) / PENELEC  (1.86%) / PEPCO (3.85%) /  PPL (4.95%) / PSEG (5.89%) /  RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>PSEG (96.08%) / RE (3.92%)</u></b></p>
b1411	Replace Salem 500 kV breaker '12X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%)  / APS (5.89%) / ATSI (7.59%)  / BGE (4.12%) / ComEd  (12.38%) / ConEd (0.55%) /  Dayton (2.02%) / DEOK  (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP***  (0.20%) / JCPL (3.57%) / ME  (1.72%) / NEPTUNE* (0.41%)  / PECO (4.97%) / PENELEC  (1.86%) / PEPCO (3.85%) /  PPL (4.95%) / PSEG (5.89%) /  RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>PSEG (96.08%) / RE (3.92%)</u></b></p>

\* Neptune Regional Transmission System, LLC

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\*\*\* Hudson Transmission Partners, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1412	Replace Salem 500 kV breaker '20X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%)  / APS (5.89%) / ATSI (7.59%)  / BGE (4.12%) / ComEd  (12.38%) / ConEd (0.55%) /  Dayton (2.02%) / DEOK  (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP***  (0.20%) / JCPL (3.57%) / ME  (1.72%) / NEPTUNE* (0.41%)  / PECO (4.97%) / PENELEC  (1.86%) / PEPCO (3.85%) /  PPL (4.95%) / PSEG (5.89%) /  RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>PSEG (96.08%) / RE (3.92%)</u></b></p>
b1413	Replace Salem 500 kV breaker '21X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%)  / APS (5.89%) / ATSI (7.59%)  / BGE (4.12%) / ComEd  (12.38%) / ConEd (0.55%) /  Dayton (2.02%) / DEOK  (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP***  (0.20%) / JCPL (3.57%) / ME  (1.72%) / NEPTUNE* (0.41%)  / PECO (4.97%) / PENELEC  (1.86%) / PEPCO (3.85%) /  PPL (4.95%) / PSEG (5.89%) /  RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>PSEG (96.08%) / RE (3.92%)</u></b></p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1414	Replace Salem 500 kV breaker '31X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.08%) / RE (3.92%)</p>
b1415	Replace Salem 500 kV breaker '32X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.08%) / RE (3.92%)</p>

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1539	Replace Tosco 230 kV breaker 'CB1' with 63 kA		PSEG (100%)
b1540	Replace Tosco 230 kV breaker 'CB2' with 63 kA		PSEG (100%)
b1541	Open the Hudson 230 kV bus tie		PSEG (100%)
b1588	Reconductor the Eagle Point - Gloucester 230 kV circuit #1 and #2 with higher conductor rating		JCPL (10.31%) / Neptune* (0.98%) / HTP (0.75%) / PECO (30.81%) / ECP** (0.82%) / PSEG (54.17%) / RE (2.16%)
b1589	Re-configure the Kearny 230 kV substation and loop the P-2216-1 (Essex - NJT Meadows) 230 kV circuit		ATSI (8.00%) / HTP (20.18%) / PENELEC (7.77%) / PSEG (61.59%) / RE (2.46%)
b1590	Upgrade the PSEG portion of the Camden Richmond 230 kV circuit to six wire conductor and replace terminal equipment at Camden		BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPSCO (1.93%) / PPL (2.46%) / ECP** (0.16%)
b1749	Advance n1237 (Replace Essex 230 kV breaker '22H' with 80kA)		PSEG (100%)
b1750	Advance n0666.5 (Replace Hudson 230 kV breaker '1HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1751	Advance n0666.3 (Replace Hudson 230 kV breaker '2HA' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1752	Advance n0666.10 (Replace Hudson 230 kV breaker '2HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1753	Marion 138 kV breaker '7PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1754	Marion 138 kV breaker '3PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1755	Marion 138 kV breaker '6PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1787	Build a second 230 kV circuit from Cox's Corner - Lumberton	AEC (4.96%) / JCPL (44.20%) / NEPTUNE* (0.53%) / HTP (0.15%) / ECP** (0.16%) / PSEG (48.08%) / RE (1.92%)
b2034	Install a reactor along the Kearny - Essex 138 kV line	PSEG (100%)
b2035	Replace Sewaren 138 kV breaker '11P'	PSEG (100%)
b2036	Replace Sewaren 138 kV breaker '21P'	PSEG (100%)
b2037	Replace PVSC 138 kV breaker '452'	PSEG (100%)
b2038	Replace PVSC 138 kV breaker '552'	PSEG (100%)
b2039	Replace Bayonne 138 kV breaker '11P'	PSEG (100%)
b2139	Reconductor the Mickleton - Gloucester 230 kV parallel circuits with double bundle conductor	PSEG (61.11%) / PECO (36.45%) / RE (2.44%)
b2146	Re-configure the Brunswick 230 kV and 69 kV substations	PSEG (96.16%) / RE (3.84%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2151	Construct Jackson Rd. 69 kV substation and loop the Cedar Grove - Hinchmans Ave into Jackson Rd. and construct Hawthorne 69 kV substation and build 69 kV circuit from Hinchmans Ave - Hawthorne - Fair Lawn	PSEG (100%)
b2159	Reconfigure the Linden, Bayway, North Ave, and Passaic Valley S.C. 138 kV substations. Construct and loop new 138 kV circuit to new airport station	PSEG (72.61%) / HTP (24.49%) / RE (2.90%)

\*Neptune Regional Transmission System, LLC

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## SCHEDULE 12 – APPENDIX

### (14) Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0216	Install -100/+525 MVAR dynamic reactive device at Black Oak	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (40.18%) / BGE (13.21%) / Dominion (25.51%) / PEPCO (21.10%)</u>
b0218	Install third Wylie Ridge 500/345kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0220	Upgrade coolers on Wylie Ridge 500/345 kV #7	
b0229	Install fourth Bedington 500/138 kV	
b0230	Install fourth Meadowbrook 500/138 kV	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		AEC (11.62%) / ConEd (1.79%) / DPL (19.05%) / Dominion (13.56%) / JCPL (15.28%) / PECO (38.70%)
		AEC (11.62%) / ConEd (1.79%) / DPL (19.05%) / Dominion (13.56%) / JCPL (15.28%) / PECO (38.70%)
		APS (50.98%) / BGE (13.42%) / DPL (2.03%) / Dominion (14.50%) / ME (1.43%) / PEPCO (17.64%)
		APS (79.16%) / BGE (3.61%) / DPL (0.86%) / Dominion (11.75%) / ME (0.67%) / PEPCO (3.95%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.





**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0238	Reconductor Doubs – Dickerson and Doubs – Aqueduct 1200 MVA	As specified under the procedures detailed in Attachment H-18B, Section 1.b	BGE (16.66%) / Dominion (33.66%) / PEPCO (49.68%)
b0240	Open the Black Oak #3 500/138 kV transformer for the loss of Hatfield – Back Oak 500 kV line		APS (100%)
b0245	Replacement of the existing 954 ACSR conductor on the Bedington – Nipetown 138 kV line with high temperature/low sag conductor		APS (100%)
b0246	Rebuild of the Double Tollgate – Old Chapel 138 kV line with 954 ACSR conductor	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)
b0273	Open both North Shenandoah #3 transformer and Strasburg – Edinburgh 138 kV line for the loss of Mount Storm – Meadowbrook 572 500 kV		APS (100%)
b0322	Convert Lime Kiln substation to 230 kV operation		APS (100%)
b0323	Replace the North Shenandoah 138/115 kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.2	Build new Meadow Brook – Loudoun 500 kV circuit (20 of 50 miles)	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  BGE (7.93%) / Dominion (76.09%) / PEPCO (15.98%)</p>
b0343	Replace Doubs 500/230 kV transformer #2	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0344	Replace Doubs 500/230 kV transformer #3	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0345	Replace Doubs 500/230 kV transformer #4	As specified under the procedures detailed in Attachment H-18B, Section 1.b

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

**Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)**

b0347.1	Build new Mt. Storm – 502 Junction 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) /  DPL (2.53%) / Dominion  (13.30%) / EKPC (2.14%) /  HTP*** (0.20%) / JCPL (3.57%) /  ME (1.72%) / NEPTUNE*  (0.41%) / PECO (4.97%) /  PENELEC (1.86%) / PEPCO  (3.85%) / PPL (4.95%) / PSEG  (5.89%) / RE (0.24%) / ECP**  (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>(APS 36.47%) / BGE (19.13%) /</u>  <u>PEPCO (44.40%)</u></p>
b0347.2	Build new Mt. Storm – Meadow Brook 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) /  DPL (2.53%) / Dominion  (13.30%) / EKPC (2.14%) /  HTP*** (0.20%) / JCPL (3.57%) /  ME (1.72%) / NEPTUNE*  (0.41%) / PECO (4.97%) /  PENELEC (1.86%) / PEPCO  (3.85%) / PPL (4.95%) / PSEG  (5.89%) / RE (0.24%) / ECP**  (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (30.37%) / Dominion</u>  <u>(46.46%) / PEPCO (23.17%)</u></p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.3	Build new 502 Junction 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.4	Upgrade Meadow Brook 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b

**Load-Ratio Share Allocation:**  
AEC (1.57%) / AEP (15.18%) /  
APS (5.89%) / ATSI (7.59%) /  
BGE (4.12%) / ComEd (12.38%)  
/ ConEd (0.55%) / Dayton  
(2.02%) / DEOK (3.15%) / DL  
(1.72%) / DPL (2.53%) /  
Dominion (13.30%) / EKPC  
(2.14%) / HTP\*\*\* (0.20%) /  
JCPL (3.57%) / ME (1.72%) /  
NEPTUNE\* (0.41%) / PECO  
(4.97%) / PENELEC (1.86%) /  
PEPCO (3.85%) / PPL (4.95%) /  
PSEG (5.89%) / RE (0.24%) /  
ECP\*\* (0.20%)

**DFAX Allocation:**  
(APS 36.47%) / BGE (19.13%) /  
PEPCO (44.40%)

**Load-Ratio Share Allocation:**  
AEC (1.57%) / AEP (15.18%) /  
APS (5.89%) / ATSI (7.59%) /  
BGE (4.12%) / ComEd (12.38%)  
/ ConEd (0.55%) / Dayton  
(2.02%) / DEOK (3.15%) / DL  
(1.72%) / DPL (2.53%) /  
Dominion (13.30%) / EKPC  
(2.14%) / HTP\*\*\* (0.20%) /  
JCPL (3.57%) / ME (1.72%) /  
NEPTUNE\* (0.41%) / PECO  
(4.97%) / PENELEC (1.86%) /  
PEPCO (3.85%) / PPL (4.95%) /  
PSEG (5.89%) / RE (0.24%) /  
ECP\*\* (0.20%)

**DFAX Allocation:**  
APS (30.37%) / Dominion  
(46.46%) / PEPCO (23.17%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.5	Replace Harrison 500 kV breaker HL-3	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>(APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)</u>
b0347.6	Upgrade (per ABB inspection) breaker HL-6	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>(APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)</u>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

<u>Required Transmission Enhancements</u>	<u>Annual Revenue Requirement</u>	<u>Responsible Customer(s)</u>
b0347.7	Upgrade (per ABB inspection) breaker HL-7	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>(APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)</u>
b0347.8	Upgrade (per ABB inspection) breaker HL-8	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>(APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)</u>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.9	Upgrade (per ABB inspection) breaker HL-10	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>(APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)</u></p>
b0347.10	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-1	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>(APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)</u></p>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.11	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-3	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>(APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)</u></p>
b0347.12	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-4	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>(APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)</u></p>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

<u>Required Transmission Enhancements</u>	<u>Annual Revenue Requirement</u>	<u>Responsible Customer(s)</u>
b0347.13	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-6	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>(APS 36.47%) / BGE (19.13%) /</u> <u>PEPCO (44.40%)</u>
b0347.14	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-7	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>(APS 36.47%) / BGE (19.13%) /</u> <u>PEPCO (44.40%)</u>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.15	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-9	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>(APS 36.47%) / BGE (19.13%) /</u> <u>PEPCO (44.40%)</u>
b0347.16	Upgrade (per ABB inspection) Harrison 500 kV breaker 'HL-3'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>(APS 36.47%) / BGE (19.13%) /</u> <u>PEPCO (44.40%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.17	Replace Meadow Brook 138 kV breaker 'MD-10'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u></p>
b0347.18	Replace Meadow Brook 138 kV breaker 'MD-11'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u></p>

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\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

<u>Required Transmission Enhancements</u>	<u>Annual Revenue Requirement</u>	<u>Responsible Customer(s)</u>
b0347.19	Replace Meadow Brook 138 kV breaker 'MD-12'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion</u> <u>(46.46%) / PEPCO (23.17%)</u>
b0347.20	Replace Meadow Brook 138 kV breaker 'MD-13'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion</u> <u>(46.46%) / PEPCO (23.17%)</u>

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\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.21	Replace Meadow Brook 138 kV breaker 'MD-14'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u></p>
b0347.22	Replace Meadow Brook 138 kV breaker 'MD-15'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.23	Replace Meadow Brook 138 kV breaker 'MD-16'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u></p>
b0347.24	Replace Meadow Brook 138 kV breaker 'MD-17'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u></p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

<u>Required Transmission Enhancements</u>	<u>Annual Revenue Requirement</u>	<u>Responsible Customer(s)</u>
b0347.25	Replace Meadow Brook 138 kV breaker 'MD-18'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u>
b0347.26	Replace Meadow Brook 138 kV breaker 'MD-22#1 CAP'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.27	Replace Meadow Brook 138 kV breaker 'MD-4'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u>
b0347.28	Replace Meadow Brook 138 kV breaker 'MD-5'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.29	Replace Meadowbrook 138 kV breaker 'MD-6'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u>
b0347.30	Replace Meadowbrook 138 kV breaker 'MD-7'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

<u>Required Transmission Enhancements</u>	<u>Annual Revenue Requirement</u>	<u>Responsible Customer(s)</u>
b0347.31	Replace Meadowbrook 138 kV breaker 'MD-8'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion</u> <u>(46.46%) / PEPCO (23.17%)</u>
b0347.32	Replace Meadowbrook 138 kV breaker 'MD-9'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion</u> <u>(46.46%) / PEPCO (23.17%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0347.33	Replace Meadow Brook 138kV breaker 'MD-1'		APS (100%)
b0347.34	Replace Meadow Brook 138kV breaker 'MD-2'		APS (100%)
b0348	Upgrade Stonewall – Inwood 138 kV with 954 ACSR conductor		APS (100%)
b0373	Convert Doubs – Monocacy 138 kV facilities to 230 kV operation		AEC (1.82%) / APS (76.84%) / DPL (2.64%) / JCPL (4.53%) / ME (9.15%) / Neptune* (0.42%) / PPL (4.60%)
b0393	Replace terminal equipment at Harrison 500 kV and Belmont 500 kV		<u><b>Load-Ratio Share Allocation:</b></u> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<u><b>DFAX Allocation:</b></u> <u>APS (100%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0406.1	Replace Mitchell 138 kV breaker “#4 bank”	APS (100%)
b0406.2	Replace Mitchell 138 kV breaker “#5 bank”	APS (100%)
b0406.3	Replace Mitchell 138 kV breaker “#2 transf”	APS (100%)
b0406.4	Replace Mitchell 138 kV breaker “#3 bank”	APS (100%)
b0406.5	Replace Mitchell 138 kV breaker “Charlerio #2”	APS (100%)
b0406.6	Replace Mitchell 138 kV breaker “Charlerio #1”	APS (100%)
b0406.7	Replace Mitchell 138 kV breaker “Shepler Hill Jct”	APS (100%)
b0406.8	Replace Mitchell 138 kV breaker “Union Jct”	APS (100%)
b0406.9	Replace Mitchell 138 kV breaker “#1-2 138 kV bus tie”	APS (100%)
b0407.1	Replace Marlowe 138 kV breaker “#1 transf”	APS (100%)
b0407.2	Replace Marlowe 138 kV breaker “MBO”	APS (100%)
b0407.3	Replace Marlowe 138 kV breaker “BMA”	APS (100%)
b0407.4	Replace Marlowe 138 kV breaker “BMR”	APS (100%)
b0407.5	Replace Marlowe 138 kV breaker “WC-1”	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0407.6	Replace Marlowe 138 kV breaker “R11”	APS (100%)
b0407.7	Replace Marlowe 138 kV breaker “W”	APS (100%)
b0407.8	Replace Marlowe 138 kV breaker “138 kV bus tie”	APS (100%)
b0408.1	Replace Trissler 138 kV breaker “Belmont 604”	APS (100%)
b0408.2	Replace Trissler 138 kV breaker “Edgelawn 90”	APS (100%)
b0409.1	Replace Weirton 138 kV breaker “Wylie Ridge 210”	APS (100%)
b0409.2	Replace Weirton 138 kV breaker “Wylie Ridge 216”	APS (100%)
b0410	Replace Glen Falls 138 kV breaker “McAlpin 30”	APS (100%)
b0417	Reconductor Mitchell – Shepler Hill Junction 138kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0418	Install a breaker failure auto-restoration scheme at Cabot 500 kV for the failure of the #6 breaker	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0419	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers	<u><b>Load-Ratio Share Allocation:</b></u> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<u><b>DFAX Allocation:</b></u> <u><b>APS (100%)</b></u>
b0420	Operating Procedure to open the Black Oak 500/138 kV transformer #3 for the loss of Hatfield – Ronco 500 kV and the Hatfield #3 Generation	APS (100%)
b0445	Upgrade substation equipment and reconductor the Tidd – Mahans Lane – Weirton 138kV circuit with 954 ACSR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0460	Raise limiting structures on Albright – Bethelboro 138 kV to raise the rating to 175 MVA normal 214 MVA emergency	APS (100%)
b0491	Construct an Amos to Welton Spring to WV state line 765 kV circuit (APS equipment)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

<u>Required Transmission Enhancements</u>	<u>Annual Revenue Requirement</u>	<u>Responsible Customer(s)</u>
b0492	Construct a Welton Spring to Kemptown 765 kV line (APS equipment)	As specified under the procedures detailed in Attachment H-19B
b0492.3	Replace Eastalco 230 kV breaker D-26	APS (100%)
b0492.4	Replace Eastalco 230 kV breaker D-28	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.5	Replace Eastalco 230 kV breaker D-31	APS (100%)
b0495	Replace existing Kammer 765/500 kV transformer with a new larger transformer	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  BGE (45.97%) / DEOK (0.01%) / PEPCO (54.02%)</p>
b0533	Reconductor the Powell Mountain – Sutton 138 kV line	APS (100%)
b0534	Install a 28.61 MVAR capacitor on Sutton 138 kV	APS (100%)
b0535	Install a 44 MVAR capacitor on Dutch Fork 138 kV	APS (100%)
b0536	Replace Doubs circuit breaker DJ1	APS (100%)
b0537	Replace Doubs circuit breaker DJ7	APS (100%)
b0538	Replace Doubs circuit breaker DJ10	APS (100%)
b0572.1	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

<b><u>Required Transmission Enhancements</u></b>	<b><u>Annual Revenue Requirement</u></b>	<b><u>Responsible Customer(s)</u></b>
b0572.2	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)
b0573	Reconfigure circuits in Butler – Cabot 138 kV area	APS (100%)
b0577	Replace Fort Martin 500 kV breaker FL-1	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (100%)</u>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0584 Install 33 MVAR 138 kV capacitor at Necessity 138 kV		APS (100%)
b0585 Increase Cecil 138 kV capacitor size to 44 MVAR, replace five 138 kV breakers at Cecil due to increased short circuit fault duty as a result of the addition of the Prexy substation		APS (100%)
b0586 Increase Whiteley 138 kV capacitor size to 44 MVAR		APS (100%)
b0587 Reconductor AP portion of Tidd – Carnegie 138 kV and Carnegie – Weirton 138 kV with 954 ACSR		APS (100%)
b0588 Install a 40.8 MVAR 138 kV capacitor at Grassy Falls		APS (100%)
b0589 Replace five 138 kV breakers at Cecil		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0590	Replace #1 and #2 breakers at Charleroi 138 kV	APS (100%)
b0591	Install a 25.2 MVAR capacitor at Seneca Caverns 138 kV	APS (100%)
b0673	Rebuild Elko – Carbon Center Junction using 230 kV construction	APS (100%)
b0674	Construct new Osage – Whiteley 138 kV circuit	APS (97.68%) / DL (0.96%) / PENELEC (1.09%) / ECP** (0.01%) / PSEG (0.25%) / RE (0.01%)
b0674.1	Replace the Osage 138 kV breaker ‘CollinsF126’	APS (100%)
b0675.1	Convert Monocacy - Walkersville 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.2	Convert Walkersville - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.3	Convert Ringgold - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.4	Convert Catoctin - Carroll 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.5	Convert portion of Ringgold Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.6	Convert Catoctin Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.7	Convert portion of Carroll Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.8	Convert Monocacy Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.9	Convert Walkersville Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0676.1	Reconductor Doubs - Lime Kiln (#207) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0676.2	Reconductor Doubs - Lime Kiln (#231) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0677	Reconductor Double Toll Gate – Riverton with 954 ACSR	APS (100%)
b0678	Reconductor Glen Falls - Oak Mound 138kV with 954 ACSR	APS (100%)
b0679	Reconductor Grand Point – Letterkenny with 954 ACSR	APS (100%)
b0680	Reconductor Greene – Letterkenny with 954 ACSR	APS (100%)
b0681	Replace 600/5 CT's at Franklin 138 kV	APS (100%)
b0682	Replace 600/5 CT's at Whiteley 138 kV	APS (100%)
b0684	Reconductor Guilford – South Chambersburg with 954 ACSR	APS (100%)
b0685	Replace Ringgold 230/138 kV #3 with larger transformer	APS (71.93%) / JCPL (4.17%) / ME (6.79%) / NEPTUNE* (0.38%) / PECO (4.05%) / PENELEC (5.88%) / ECP** (0.18%) / PSEG (6.37%) / RE (0.25%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b0704	Install a third Cabot 500/138 kV transformer		APS (74.36%) / DL (2.73%) PENELEC (22.91%)
b0797	Advance n0321 (Replace Doubs Circuit Breaker DJ2)		APS(100%)
b0798	Advance n0322 (Replace Doubs Circuit Breaker DJ3)		APS(100%)
b0799	Advance n0323 (Replace Doubs Circuit Breaker DJ6)		APS(100%)
b0800	Advance n0327 (Replace Doubs Circuit Breaker DJ16)		APS(100%)
b0941	Replace Opequon 138 kV breaker 'BUSTIE'		APS(100%)
b0942	Replace Butler 138 kV breaker '#1 BANK'		APS(100%)
b0943	Replace Butler 138 kV breaker '#2 BANK'		APS(100%)
b0944	Replace Yukon 138 kV breaker 'Y-8'		APS(100%)
b0945	Replace Yukon 138 kV breaker 'Y-3'		APS(100%)
b0946	Replace Yukon 138 kV breaker 'Y-1'		APS(100%)
b0947	Replace Yukon 138 kV breaker 'Y-5'		APS(100%)
b0948	Replace Yukon 138 kV breaker 'Y-2'		APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0949	Replace Yukon 138 kV breaker 'Y-19'		APS(100%)
b0950	Replace Yukon 138 kV breaker 'Y-4'		APS(100%)
b0951	Replace Yukon 138 kV breaker 'Y-9'		APS(100%)
b0952	Replace Yukon 138 kV breaker 'Y-11'		APS(100%)
b0953	Replace Yukon 138 kV breaker 'Y-13'		APS(100%)
b0954	Replace Charleroi 138 kV breaker '#1 XFMR BANK'		APS(100%)
b0955	Replace Yukon 138 kV breaker 'Y-7'		APS(100%)
b0956	Replace Pruntytown 138 kV breaker 'P-9'		APS(100%)
b0957	Replace Pruntytown 138 kV breaker 'P-12'		APS(100%)
b0958	Replace Pruntytown 138 kV breaker 'P-15'		APS(100%)
b0959	Replace Charleroi 138 kV breaker '#2 XFMR BANK'		APS(100%)
b0960	Replace Pruntytown 138 kV breaker 'P-2'		APS(100%)
b0961	Replace Pruntytown 138 kV breaker 'P-5'		APS(100%)
b0962	Replace Yukon 138 kV breaker 'Y-18'		APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0963 Replace Yukon 138 kV breaker 'Y-10'		APS(100%)
b0964 Replace Pruntytown 138 kV breaker 'P-11'		APS(100%)
b0965 Replace Springdale 138 kV breaker '138E'		APS(100%)
b0966 Replace Pruntytown 138 kV breaker 'P-8'		APS(100%)
b0967 Replace Pruntytown 138 kV breaker 'P-14'		APS(100%)
b0968 Replace Ringgold 138 kV breaker '#3 XFMR BANK'		APS(100%)
b0969 Replace Springdale 138 kV breaker '138C'		APS(100%)
b0970 Replace Rivesville 138 kV breaker '#8 XFMR BANK'		APS(100%)
b0971 Replace Springdale 138 kV breaker '138F'		APS(100%)
b0972 Replace Belmont 138 kV breaker 'B-16'		APS(100%)
b0973 Replace Springdale 138 kV breaker '138G'		APS(100%)
b0974 Replace Springdale 138 kV breaker '138V'		APS(100%)
b0975 Replace Armstrong 138 kV breaker 'BROOKVILLE'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0976	Replace Springdale 138 kV breaker '138P'	APS(100%)
b0977	Replace Belmont 138 kV breaker 'B-17'	APS(100%)
b0978	Replace Springdale 138 kV breaker '138U'	APS(100%)
b0979	Replace Springdale 138 kV breaker '138D'	APS(100%)
b0980	Replace Springdale 138 kV breaker '138R'	APS(100%)
b0981	Replace Yukon 138 kV breaker 'Y-12'	APS(100%)
b0982	Replace Yukon 138 kV breaker 'Y-17'	APS(100%)
b0983	Replace Yukon 138 kV breaker 'Y-14'	APS(100%)
b0984	Replace Rivesville 138 kV breaker '#10 XFMR BANK'	APS(100%)
b0985	Replace Belmont 138 kV breaker 'B-14'	APS(100%)
b0986	Replace Armstrong 138 kV breaker 'RESERVE BUS'	APS(100%)
b0987	Replace Yukon 138 kV breaker 'Y-16'	APS(100%)
b0988	Replace Springdale 138 kV breaker '138T'	APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0989	Replace Edgelawn 138 kV breaker 'GOFF RUN #632'		APS(100%)
b0990	Change reclosing on Cabot 138 kV breaker 'C-9'		APS(100%)
b0991	Change reclosing on Belmont 138 kV breaker 'B-7'		APS(100%)
b0992	Change reclosing on Belmont 138 kV breaker 'B-12'		APS(100%)
b0993	Change reclosing on Belmont 138 kV breaker 'B-9'		APS(100%)
b0994	Change reclosing on Belmont 138 kV breaker 'B-19'		APS(100%)
b0995	Change reclosing on Belmont 138 kV breaker 'B-21'		APS(100%)
b0996	Change reclosing on Willow Island 138 kV breaker 'FAIRVIEW #84'		APS(100%)
b0997	Change reclosing on Cabot 138 kV breaker 'C-4'		APS(100%)
b0998	Change reclosing on Cabot 138 kV breaker 'C-1'		APS(100%)
b0999	Replace Redbud 138 kV breaker 'BUS TIE'		APS(100%)
b1022.1	Reconfigure the Peters to Bethel Park 138 kV line and Elrama to Woodville 138 kV line to create a 138 kV path from Woodville to Peters and a 138 kV path from Elrama to Bethel Park		APS (96.98%) / DL (3.02%)
b1022.3	Add static capacitors at Smith 138 kV		APS (96.98%) / DL (3.02%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1022.4	Add static capacitors at North Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.5	Add static capacitors at South Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.6	Add static capacitors at Manifold 138 kV		APS (96.98%) / DL (3.02%)
b1022.7	Add static capacitors at Houston 138 kV		APS (96.98%) / DL (3.02%)
b1023.1	Install a 500/138 kV transformer at 502 Junction		APS (100%)
b1023.2	Construct a new Franklin - 502 Junction 138 kV line including a rebuild of the Whiteley - Franklin 138 kV line to double circuit		APS (100%)
b1023.3	Construct a new 502 Junction - Osage 138 kV line		APS (100%)
b1023.4	Construct Braddock 138 kV breaker station that connects the Charleroi - Gordon 138 kV line, Washington - Franklin 138 kV line and the Washington - Vanceville 138 kV line including a 66 MVAR capacitor		APS (100%)
b1027	Increase the size of the shunt capacitors at Enon 138 kV		APS (100%)
b1028	Raise three structures on the Osage - Collins Ferry 138 kV line to increase the line rating		APS (100%)
b1128	Reconductor the Edgewater - Vasco Tap; Edgewater - Loyalhanna 138 kV lines with 954 ACSR		APS (100%)
b1129	Reconductor the East Waynesboro - Ringgold 138 kV line with 954 ACSR		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1131	Upgrade Double Tollgate – Meadowbrook MDT Terminal Equipment		APS (100%)
b1132	Upgrade Double Tollgate-Meadowbrook MBG terminal equipment		APS (100%)
b1133	Upgrade terminal equipment at Springdale		APS (100%)
b1135	Reconductor the Bartonville – Meadowbrook 138 kV line with high temperature conductor		APS (100%)
b1137	Reconductor the Eastgate – Luxor 138 kV; Eastgate – Sony 138 kV line with 954 ACSR		APS (78.59%) / PENELEC (14.08%) / ECP ** (0.23%) / PSEG (6.83%) / RE (0.27%)
b1138	Reconductor the King Farm – Sony 138 kV line with 954 ACSR		APS (100%)
b1139	Reconductor the Yukon – Waltz Mills 138 kV line with high temperature conductor		APS (100%)
b1140	Reconductor the Bracken Junction – Luxor 138 kV line with 954 ACSR		APS (100%)
b1141	Reconductor the Sewickley – Waltz Mills Tap 138 kV line with high temperature conductor		APS (100%)
b1142	Reconductor the Bartonville – Stephenson 138 kV; Stonewall – Stephenson 138 kV line with 954 ACSR		APS (100%)
b1143	Reconductor the Youngwood – Yukon 138 kV line with high temperature conductor		APS (89.92%) / PENELEC (10.08%)
b1144	Reconductor the Bull Creek Junction – Cabot 138 kV line with high temperature conductor		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1145	Reconductor the Lawson Junction – Cabot 138 kV line with high temperature conductor	APS (100%)
b1146	Replace Layton - Smithton #61 138 kV line structures to increase line rating	APS (100%)
b1147	Replace Smith – Yukon 138 kV line structures to increase line rating	APS (100%)
b1148	Reconductor the Loyalhanna – Luxor 138 kV line with 954 ACSR	APS (100%)
b1149	Reconductor the Luxor – Stony Springs Junction 138 kV line with 954 ACSR	APS (100%)
b1150	Upgrade terminal equipment at Social Hall	APS (100%)
b1151	Reconductor the Greenwood – Redbud 138 kV line with 954 ACSR	APS (100%)
b1152	Reconductor Grand Point – South Chambersburg	APS (100%)
b1159	Replace Peters 138 kV breaker ‘Bethel P OCB’	APS (100%)
b1160	Replace Peters 138 kV breaker ‘Cecil OCB’	APS (100%)
b1161	Replace Peters 138 kV breaker ‘Union JctOCB’	APS (100%)
b1162	Replace Double Toll Gate 138 kV breaker ‘DRB-2’	APS (100%)
b1163	Replace Double Toll Gate 138 kV breaker ‘DT 138 kV OCB’	APS (100%)
b1164	Replace Cecil 138 kV breaker ‘Enlow OCB’	APS (100%)
b1165	Replace Cecil 138 kV breaker ‘South Fayette’	APS (100%)
b1166	Replace Wylie Ridge 138 kV breaker ‘W-9’	APS (100%)
b1167	Replace Reid 138 kV breaker ‘RI-2’	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1171.1	Install the second Black Oak 500/138 kV transformer, two 138 kV breaker, and related substation work		BGE (20.76%) / DPL (3.14%) / Dominion (39.55%) / ME (2.71%) / PECO (3.36%) / PEPCO (30.48%)
b1171.3	Install six 500 kV breakers and remove BOL1 500 kV breaker at Black Oak		AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b1200	Reconductor Double Toll Gate – Greenwood 138 kV with 954 ACSR conductor		APS (100%)
b1221.1	Convert Carbon Center from 138 kV to a 230 kV ring bus		APS (100%)
b1221.2	Construct Bear Run 230 kV substation with 230/138 kV transformer		APS (100%)
b1221.3	Loop Carbon Center Junction – Williamette line into Bear Run		APS (100%)
b1221.4	Carbon Center – Carbon Center Junction & Carbon Center Junction – Bear Run conversion from 138 kV to 230 kV		APS (100%)
b1230	Reconductor Willow-Eureka & Eureka-St Mary 138 kV lines		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1232	Reconductor Nipetown – Reid 138 kV with 1033 ACCR		AEC (1.40%) / APS (75.74%) / DPL (1.92%) / JCPL (2.92%) / ME (6.10%) / Neptune (0.27%) / PECO (4.40%) / PENELEC (3.26%) / PPL (3.99%)
b1233.1	Upgrade terminal equipment at Washington		APS (100%)
b1234	Replace structures between Ridgeway and Paper city		APS (100%)
b1235	Reconductor the Albright – Black Oak AFA 138 kV line with 795 ACSS/TW		APS (30.25%) / BGE (16.10%) / Dominion (30.51%) / PEPCO (23.14%)
b1237	Upgrade terminal equipment at Albright, replace bus and line side breaker disconnects and leads, replace breaker risers, upgrade RTU and line		APS (100%)
b1238	Install a 138 kV 44 MVAR capacitor at Edgelawn substation		APS (100%)
b1239	Install a 138 kV 44 MVAR capacitor at Ridgeway substation		APS (100%)
b1240	Install a 138 kV 44 MVAR capacitor at Elko Substation		APS (100%)
b1241	Upgrade terminal equipment at Washington substation on the GE Plastics/DuPont terminal		APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1242 Replace structures between Collins Ferry and West Run		APS (100%)
b1243 Install a 138 kV capacitor at Potter Substation		APS (100%)
b1261 Replace Butler 138 kV breaker '1-2 BUS 138'		APS (100%)
b1383 Install 2nd 500/138 kV transformer at 502 Junction		APS (93.27%) / DL (5.39%) / PENELEC (1.34%)
b1384 Reconductor approximately 2.17 miles of Bedington – Shepherdstown 138 kV with 954 ACSR		APS (100%)
b1385 Reconductor Halfway – Paramount 138 kV with 1033 ACCR		APS (100%)
b1386 Reconductor Double Tollgate – Meadow Brook 138 kV ckt 2 with 1033 ACCR		APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1387 Reconductor Double Tollgate – Meadow Brook 138 kV		APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1388 Reconductor Feagans Mill – Millville 138 kV with 954 ACSR		APS (100%)
b1389 Reconductor Bens Run – St. Mary's 138 kV with 954 ACSR		AEP (12.40%) / APS (17.80%) / DL (69.80%)
b1390 Replace Bus Tie Breaker at Opequon		APS (100%)
b1391 Replace Line Trap at Gore		APS (100%)
b1392 Replace structure on Belmont – Trissler 138 kV line		APS (100%)
b1393 Replace structures Kingwood – Pruntytown 138 kV line		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b1395	Upgrade Terminal Equipment at Kittanning		APS (100%)
b1401	Change reclosing on Pruntytown 138 kV breaker 'P-16' to 1 shot at 15 seconds		APS (100%)
b1402	Change reclosing on Rivesville 138 kV breaker 'Pruntytown #34' to 1 shot at 15 seconds		APS (100%)
b1403	Change reclosing on Yukon 138 kV breaker 'Y21 Shepler' to 1 shot at 15 seconds		APS (100%)
b1404	Replace the Kiski Valley 138 kV breaker 'Vandergrift' with a 40 kA breaker		APS (100%)
b1405	Change reclosing on Armstrong 138 kV breaker 'GARETTRJCT' at 1 shot at 15 seconds		APS (100%)
b1406	Change reclosing on Armstrong 138 kV breaker 'KITTANNING' to 1 shot at 15 seconds		APS (100%)
b1407	Change reclosing on Armstrong 138 kV breaker 'BURMA' to 1 shot at 15 seconds		APS (100%)
b1408	Replace the Weirton 138 kV breaker 'Tidd 224' with a 40 kA breaker		APS (100%)
b1409	Replace the Cabot 138 kV breaker 'C9 Kiski Valley' with a 40 kA breaker		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b1507.2	Terminal Equipment upgrade at Doubs substation		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>APS (19.55%) / BGE (15.30%) /</u> <u>Dominion (48.38%) / PEPCO</u> <u>(16.77%)</u>
b1507.3	Mt. Storm – Doubs transmission line rebuild in Maryland – Total line mileage for APS is 2.71 miles		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>APS (19.55%) / BGE (15.30%) /</u> <u>Dominion (48.38%) / PEPCO</u> <u>(16.77%)</u>
b1510	Install 59.4 MVAR capacitor at Waverly		APS (100%)
b1672	Install a 230 kV breaker at Carbon Center		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0539	Replace Doubs circuit breaker DJ11		APS (100%)
b0540	Replace Doubs circuit breaker DJ12		APS (100%)
b0541	Replace Doubs circuit breaker DJ13		APS (100%)
b0542	Replace Doubs circuit breaker DJ20		APS (100%)
b0543	Replace Doubs circuit breaker DJ21		APS (100%)
b0544	Remove instantaneous reclose from Eastalco circuit breaker D-26		APS (100%)
b0545	Remove instantaneous reclose from Eastalco circuit breaker D-28		APS (100%)
b0559	Install 200 MVAR capacitor at Meadow Brook 500 kV substation	b0328.2	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

<u>Required Transmission Enhancements</u>	<u>Annual Revenue Requirement</u>	<u>Responsible Customer(s)</u>
b0560	Install 250 MVAR capacitor at Kemptown 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>
b1803	Build a 300 MVAR Switched Shunt at Doubs 500 kV and increase (~50 MVAR) in size the existing Switched Shunt at Doubs 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (19.55%) / BGE (15.30%) / Dominion (48.38%) / PEPCO (16.77%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1804	Install a new 600 MVAR SVC at Meadowbrook 500kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</u></p>
b1816.1	Replace relaying at the Mt. Airy substation on the Carroll - Mt. Airy 230 kV line	APS (100%)
b1816.2	Adjust the control settings of all existing capacitors at Mt Airy 34.5kV, Monocacy 138kV, Ringgold 138kV served by Potomac Edison's Eastern 230 kV network to ensure that all units will be on during the identified N-1-1 contingencies	APS (100%)
b1816.3	Replace existing unidirectional LTC controller on the No. 4, 230/138 kV transformer at Carroll substation with a bidirectional unit	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1816.4	Isolate and bypass the 138 kV reactor at Germantown Substation	APS (100%)
b1816.6	Replace 336.4 ACSR conductor on the Catocin - Carroll 138 kV line using 556.5 ACSR (26/7) or equivalent on existing structures (12.7 miles), 800 A wave traps at Carroll and Catocin with 1200 A units, and 556.5 ACSR SCCIR (Sub-conductor) line risers and bus traps with 795 ACSR or equivalent	APS (100%)
b1822	Replace the 1200 A wave trap, line risers, breaker risers with 1600 A capacity terminal equipment at Reid 138 kV SS	APS (100%)
b1823	Replace the 800 A wave trap with a 1200 A wave trap at Millville 138 kV substation	APS (100%)
b1824	Reconductor Grant Point - Guilford 138kV line approximately 8 miles of 556 ACSR with 795 ACSR	APS (100%)
b1825	Replace the 800 Amp line trap at Butler 138 kV Sub on the Cabot East 138 kV line	APS (100%)
b1826	Change the CT ratio at Double Toll Gate 138 kV SS on MDT line	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1827	Change the CT ratio at Double Toll Gate 138 kV SS on MBG line	APS (100%)
b1828.1	Reconductor the Bartonville – Stephenson 3.03 mile 138 kV line of 556 ACSR with 795 ACSR	APS (100%)
b1828.2	Reconductor the Stonewall – Stephenson 2.08 mile 138 kV line of 556 ACSR with 795 ACSR	APS (100%)
b1829	Replace the existing 138 kV 556.5 ACSR substation conductor risers with 954 ACSR at the Redbud 138 kV substation, including but not limited to the line side disconnect leads	APS (100%)
b1830	Replace 1200 A wave trap and 1024 ACAR breaker risers at Halfway 138 kV substation, and replace 1024 ACAR breaker risers at Paramount 138 kV substation	APS (100%)
b1832	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 1 (207) 230 kV line terminal	APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1833 Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 2 (231) 230 kV line terminal		APS (100%)
b1835 Reconductor 14.3 miles of 556 ACSR with 795 ACSR from Old Chapel to Millville 138 kV and upgrade line risers at Old Chapel 138 kV and Millville 138 kV and replace 1200 A wave trap at Millville 138 kV		APS (37.68%) / Dominion (34.46%) / PEPCO (13.69%) / BGE (11.45%) / ME (2.01%) / PENELEC (0.53%) / DL (0.18%)
b1836 Replace 1200 A wave trap with 1600 A wave trap at Reid 138 kV SS		APS (100%)
b1837 Replace 750 CU breaker risers with 795 ACSR at Marlowe 138 kV and replace 1200 A wave traps with 1600 A wave traps at Marlowe 138 kV and Bedington 138 kV		APS (100%)
b1838 Replace the 1200 A Bedington 138 kV line air switch and the 1200 A 138 kV bus tie air switch at Nipetown 138 kV with 1600 A switches		APS (100%)
b1839 Install additional 33 MVAR capacitors at Grand Point 138 kV SS and Guildford 138 kV SS		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1840	Construct a 138 kV line between Buckhannon and Weston 138 kV substations	APS (100%)
b1902	Replace line trap at Stonewall on the Stephenson 138 kV line terminal	APS (100%)
b1941	Loop the Homer City-Handsome Lake 345 kV line into the Armstrong substation and install a 345/138 kV transformer at Armstrong	APS (67.86%) / PENELEC (32.14%)
b1942	Change the CT ratio at Millville to improve the Millville – Old Chapel 138 kV line ratings	APS (100%)
b1964	Convert Moshannon substation to a 4 breaker 230 kV ring bus	APS (41.06%) / DPL (6.68%) / JCPL (5.48%) / ME (10.70%) / Neptune* (0.53%) / PECO (15.53%) / PPL (20.02%)
b1965	Install a 44 MVAR 138 kV capacitor at Luxor substation	APS (100%)
b1986	Upgrade the AP portion of the Elrama – Mitchell 138 kV line by replace breaker risers on the Mitchell 138 kV bus on the Elrama terminal	APS (100%)
b1987	Reconductor the Osage-Collins Ferry 138 kV line with 795 ACSS. Upgrade terminal equipment at Osage and Collins Ferry	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

<b><u>Required Transmission Enhancements</u></b>	<b><u>Annual Revenue Requirement</u></b>	<b><u>Responsible Customer(s)</u></b>
b1988	Raise structures between Lake Lynn and West Run to eliminate the clearance de-rates on the West Run – Lake Lynn 138 kV line	APS (100%)
b1989	Raise structures between Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line	APS (100%)
b2095	Replace Weirt 138 kV breaker 'S-TORONTO226' with 63kA rated breaker	APS (100%)
b2096	Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'	APS (100%)
b2097	Replace Ridgeley 138 kV breaker '#2 XFMR OCB'	APS (100%)
b2098	Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker	APS (100%)
b2099	Revise the reclosing of Ridgeley 138 kV breaker 'RC1'	APS (100%)

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\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2100	Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker		APS (100%)
b2101	Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker		APS (100%)
b2102	Replace Armstrong 138 kV breaker 'GARETTRJCT' with 40kA rated breaker		APS (100%)
b2103	Replace Armstrong 138 kV breaker 'BURMA' with 40kA rated breaker		APS (100%)
b2104	Replace Armstrong 138 kV breaker 'KITTANNING' with 40kA rated breaker		APS (100%)
b2105	Replace Armstrong 138 kV breaker 'KISSINGERJCT' with 40kA rated breaker		APS (100%)
b2106	Replace Wylie Ridge 345 kV breaker 'WK-1' with 63kA rated breaker		APS (100%)
b2107	Replace Wylie Ridge 345 kV breaker 'WK-2' with 63kA rated breaker		APS (100%)
b2108	Replace Wylie Ridge 345 kV breaker 'WK-3' with 63kA rated breaker		APS (100%)
b2109	Replace Wylie Ridge 345 kV breaker 'WK-4' with 63kA rated breaker		APS (100%)
b2110	Replace Wylie Ridge 345 kV breaker 'WK-6' with 63kA rated breaker		APS (100%)
b2111	Replace Wylie Ridge 138 kV breaker 'WK-7' with 63kA rated breaker		APS (100%)
b2112	Replace Wylie Ridge 345 kV breaker 'WK-5'		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2113	Replace Weirton 138 kV breaker 'NO 6 XFMR' with 63kA rated breaker		APS (100%)
b2114	Replace Armstrong 138 kV breaker 'Bus-Tie' (Status On-Hold pending retirement)		APS (100%)
b2124.1	Add a new 138 kV line exit		APS (100%)
b2124.2	Construct a 138 kV ring bus and install a 138/69 kV autotransformer		APS (100%)
b2124.3	Add new 138 kV line exit and install a 138/25 kV transformer		APS (100%)
b2124.4	Construct approximately 5.5 miles of 138 kV line		APS (100%)
b2124.5	Convert approximately 7.5 miles of 69 kV to 138 kV		APS (100%)
b2156	Install a 75 MVAR 230 kV capacitor at Shingletown Substation		APS (100%)
b2165	Replace 800A wave trap at Stonewall with a 1200 A wave trap		APS (100%)
b2166	Reconductor the Millville – Sleepy Hollow 138kV 4.25 miles of 556 ACSR with 795 ACSR, upgrade line risers at Sleepy Hollow, and change 1200 A CT tap at Millville to 800		APS (100%)
b2168	For Grassy Falls 138kV Capacitor bank adjust turn-on voltage to 1.0pu with a high limit of 1.04pu, For Crupperneck and Powell Mountain 138kV Capacitor Banks adjust turn-on voltage to 1.01pu with a high limit of 1.035pu		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2169	Replace/Raise structures on the Yukon-Smithton 138 kV line section to eliminate clearance de-rate	APS (100%)
b2170	Replace/Raise structures on the Smithton-Shepler Hill Jct 138 kV line section to eliminate clearance de-rate	APS (100%)
b2171	Replace/Raise structures on the Parsons-William 138 kV line section to eliminate clearance de-rate	APS (100%)
b2172	Replace/Raise structures on the Parsons - Loughs Lane 138 kV line section to eliminate clearance de-rate	APS (100%)

## SCHEDULE 12 – APPENDIX

- (17) **AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0318	Install a 765/138 kV transformer at Amos		AEP (99.00%) / PEPCO (1.00%)
b0324	Replace entrance conductors, wave traps, and risers at the Tidd 345 kV station on the Tidd – Canton Central 345 kV circuit		AEP (100%)
b0447	Replace Cook 345 kV breaker M2		AEP (100%)
b0448	Replace Cook 345 kV breaker N2		AEP (100%)
b0490	Construct an Amos – Bedington 765 kV circuit (AEP equipment)	As specified under the procedures detailed in Attachment H-19B	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.2	Replace Amos 138 kV breaker 'B'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p>
		<p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0490.3	Replace Amos 138 kV breaker 'B1'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p>
		<p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>



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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.4	Replace Amos 138 kV breaker 'C'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>
b0490.5	Replace Amos 138 kV breaker 'C1'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.6	Replace Amos 138 kV breaker 'D'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>
b0490.7	Replace Amos 138 kV breaker 'D2'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.8	Replace Amos 138 kV breaker 'E'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0490.9	Replace Amos 138 kV breaker 'E2'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0504	Add two advanced technology circuit breakers at Hanging Rock 765 kV to improve operational performance	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEP (100%)</u></p>
b0570	Reconductor East Side Lima – Sterling 138 kV	AEP (41.99%) / ComEd (58.01%)
b0571	Reconductor West Millersport – Millersport 138 kV	AEP (73.83%) / ComEd (19.26%) / Dayton (6.91%)
b0748	Establish a new 69 kV circuit between the Canal Road and East Wooster stations, establish a new 69 kV circuit between the West Millersburg and Moreland Switch stations (via Shreve), add reactive support via cap banks	AEP (100%)
b0838	Hazard Area 138 kV and 69 kV Improvement Projects	AEP (100%)
b0839	Replace existing 450 MVA transformer at Twin Branch 345 / 138 kV with a 675 MVA transformer	AEP (99.73%) / Dayton (0.27%)
b0840	String a second 138 kV circuit on the open tower position between Twin Branch and East Elkhart	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0840.1	Establish a new 138/69-34.5kV Station to interconnect the existing 34.5kV network	AEP (100%)
b0917	Replace Baileysville 138 kV breaker 'P'	AEP (100%)
b0918	Replace Riverview 138 kV breaker '634'	AEP (100%)
b0919	Replace Torrey 138 kV breaker 'W'	AEP (100%)
b1032.1	Construct a new 345/138kV station on the Marquis-Bixby 345kV line near the intersection with Ross - Highland 69kV	AEP (89.97%) / Dayton (10.03%)
b1032.2	Construct two 138kV outlets to Delano 138kV station and to Camp Sherman station	AEP (89.97%) / Dayton (10.03%)
b1032.3	Convert Ross - Circleville 69kV to 138kV	AEP (89.97%) / Dayton (10.03%)
b1032.4	Install 138/69kV transformer at new station and connect in the Ross - Highland 69kV line	AEP (89.97%) / Dayton (10.03%)
b1033	Add a third delivery point from AEP's East Danville Station to the City of Danville.	AEP (100%)
b1034.1	Establish new South Canton - West Canton 138kV line (replacing Torrey - West Canton) and Wagenhals - Wayview 138kV	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.2	Loop the existing South Canton - Wayview 138kV circuit in-and-out of West Canton	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.3	Install a 345/138kV 450 MVA transformer at Canton Central	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.4	Rebuild/reconductor the Sunnyside - Torrey 138kV line	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.5	Disconnect/eliminate the West Canton 138kV terminal at Torrey Station	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.6	Replace all 138kV circuit breakers at South Canton Station and operate the station in a breaker and a half configuration	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.7	Replace all obsolete 138kV circuit breakers at the Torrey and Wagenhals stations	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.8	Install additional 138kV circuit breakers at the West Canton, South Canton, Canton Central, and Wagenhals stations to accommodate the new circuits	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1035	Establish a third 345kV breaker string in the West Millersport Station. Construct a new West Millersport – Gahanna 138kV circuit. Miscellaneous improvements to 138kV transmission system.	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1036	Upgrade terminal equipment at Poston Station and update remote end relays	AEP (100%)
b1037	Sag check Bonsack–Cloverdale 138 kV, Cloverdale–Centerville 138kV, Centerville–Ivy Hill 138kV, Ivy Hill–Reusens 138kV, Bonsack–Reusens 138kV and Reusens–Monel–Gomingo–Joshua Falls 138 kV.	AEP (100%)
b1038	Check the Crooksville - Muskingum 138 kV sag and perform the required work to improve the emergency rating	AEP (100%)
b1039	Perform a sag study for the Madison – Cross Street 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1040	Rebuild an 0.065 mile section of the New Carlisle – Olive 138 kV line and change the 138 kV line switches at New Carlisle	AEP (100%)
b1041	Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating	AEP (100%)
b1042	Perform sag studies to raise the emergency rating of Amos – Poca 138kV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1043	Perform sag studies to raise the emergency rating of Turner - Ruth 138kV	AEP (100%)
b1044	Perform sag studies to raise the emergency rating of Kenova – South Point 138kV	AEP (100%)
b1045	Perform sag studies of Tri State - Darrah 138 kV	AEP (100%)
b1046	Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating	AEP (100%)
b1047	Perform sag study of Otter Switch - Altavista 138kV to raise the emergency rating	AEP (100%)
b1048	Reconductor the Bixby - Three C - Groves and Bixby - Groves 138 kV tower line	AEP (100%)
b1049	Upgrade the risers at the Riverside station to increase the rating of Benton Harbor – Riverside 138kV	AEP (100%)
b1050	Rebuilding and reconductor the Bixby – Pickerington Road - West Lancaster 138 kV line	AEP (100%)
b1051	Perform a sag study for the Kenzie Creek – Pokagon 138 kV line and perform the required work to improve the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1052	Unsix-wire the existing Hyatt - Sawmill 138 kV line to form two Hyatt - Sawmill 138 kV circuits	AEP (100%)
b1053	Perform a sag study and remediation of 32 miles between Claytor and Matt Funk.	AEP (100%)
b1091	Add 28.8 MVAR 138 kV capacitor bank at Huffman and 43.2 MVAR 138 kV Bank at Jubal Early and 52.8 MVAR 138 kV Bank at Progress Park Stations	AEP (100%)
b1092	Add 28.8 MVAR 138 kV capacitor bank at Sullivan Gardens and 52.8 MVAR 138 kV Bank at Reedy Creek Stations	AEP (100%)
b1093	Add a 43.2 MVAR capacitor bank at the Morgan Fork 138 kV Station	AEP (100%)
b1094	Add a 64.8 MVAR capacitor bank at the West Huntington 138 kV Station	AEP (100%)
b1108	Replace Ohio Central 138 kV breaker 'C2'	AEP (100%)
b1109	Replace Ohio Central 138 kV breaker 'D1'	AEP (100%)
b1110	Replace Sporn A 138 kV breaker 'J'	AEP (100%)
b1111	Replace Sporn A 138 kV breaker 'J2'	AEP (100%)
b1112	Replace Sporn A 138 kV breaker 'L'	AEP (100%)
b1113	Replace Sporn A 138 kV breaker 'L1'	AEP (100%)
b1114	Replace Sporn A 138 kV breaker 'L2'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1115	Replace Sporn A 138 kV breaker 'N'	AEP (100%)
b1116	Replace Sporn A 138 kV breaker 'N2'	AEP (100%)
b1227	Perform a sag study on Altavista – Leesville 138 kV circuit	AEP (100%)
b1231	Replace the existing 138/69-12 kV transformer at West Moulton Station with a 138/69 kV transformer and a 69/12 kV transformer	AEP (96.69%) / Dayton (3.31%)
b1375	Replace Roanoke 138 kV breaker 'T'	AEP (100%)
b1376	Replace Roanoke 138 kV breaker 'E'	AEP (100%)
b1377	Replace Roanoke 138 kV breaker 'F'	AEP (100%)
b1378	Replace Roanoke 138 kV breaker 'G'	AEP (100%)
b1379	Replace Roanoke 138 kV breaker 'B'	AEP (100%)
b1380	Replace Roanoke 138 kV breaker 'A'	AEP (100%)
b1381	Replace Olive 345 kV breaker 'E'	AEP (100%)
b1382	Replace Olive 345 kV breaker 'R2'	AEP (100%)
b1416	Perform a sag study on the Desoto – Deer Creek 138 kV line to increase the emergency rating	AEP (100%)
b1417	Perform a sag study on the Delaware – Madison 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1418	Perform a sag study on the Rockhill – East Lima 138 kV line to increase the emergency rating	AEP (100%)
b1419	Perform a sag study on the Findlay Center – Fostoria Ctl 138 kV line to increase the emergency rating	AEP (100%)
b1420	A sag study will be required to increase the emergency rating for this line. Depending on the outcome of this study, more action may be required in order to increase the rating	AEP (100%)
b1421	Perform a sag study on the Sorenson – McKinley 138 kV line to increase the emergency rating	AEP (100%)
b1422	Perform a sag study on John Amos – St. Albans 138 kV line to allow for operation up to its conductor emergency rating	AEP (100%)
b1423	A sag study will be performed on the Chemical – Capitol Hill 138 kV line to determine if the emergency rating can be utilized	AEP (100%)
b1424	Perform a sag study for Benton Harbor – West Street – Hartford 138 kV line to improve the emergency rating	AEP (100%)
b1425	Perform a sag study for the East Monument – East Danville 138 kV line to allow for operation up to the conductor's maximum operating temperature	AEP (100%)
b1426	Perform a sag study for the Reusens – Graves 138 kV line to allow for operation up to the conductor's maximum operating temperature	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1427 Perform a sag study on Smith Mountain – Leesville – Altavista – Otter 138 kV and on Boones – Forest – New London – JohnsMT – Otter		AEP (100%)
b1428 Perform a sag study on Smith Mountain – Candler's Mountain 138 kV and Joshua Falls – Cloverdale 765 kV to allow for operation up to		AEP (100%)
b1429 Perform a sag study on Fremont – Clinch River 138 kV to allow for operation up to its conductor emergency ratings		AEP (100%)
b1430 Install a new 138 kV circuit breaker at Benton Harbor station and move the load from Watervliet 34.5 kV station to West street 138 kV		AEP (100%)
b1432 Perform a sag study on the Kenova – Tri State 138 kV line to allow for operation up to their conductor emergency rating		AEP (100%)
b1433 Replace risers in the West Huntington Station to increase the line ratings which would eliminate the overloads for the contingencies listed		AEP (100%)
b1434 Perform a sag study on the line from Desoto to Madison. Replace bus and risers at Daleville station and replace bus and risers at Madison		AEP (100%)
b1435 Replace the 2870 MCM ACSR riser at the Sporn station		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1436	Perform a sag study on the Sorenson – Illinois Road 138 kV line to increase the emergency MOT for this line. Replace bus and risers at Illinois Road	AEP (100%)
b1437	Perform sag study on Rock Cr. – Hummel Cr. 138 kV to increase the emergency MOT for the line, replace bus and risers at Huntington J., and replace relays for Hummel Cr. – Hunt – Soren. Line at Soren	AEP (100%)
b1438	Replacement of risers at McKinley and Industrial Park stations and performance of a sag study for the 4.53 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1439	By replacing the risers at Lincoln both the Summer Normal and Summer Emergency ratings will improve to 268 MVA	AEP (100%)
b1440	By replacing the breakers at Lincoln the Summer Emergency rating will improve to 251 MVA	AEP (100%)
b1441	Replacement of risers at South Side and performance of a sag study for the 1.91 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1442	Replacement of 954 ACSR conductor with 1033 ACSR and performance of a sag study for the 4.54 miles of 2-636 ACSR section is expected	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1443 Station work at Thelma and Busseyville Stations will be performed to replace bus and risers		AEP (100%)
b1444 Perform electrical clearance studies on Clinch River – Clinchfield 139 kV line (a.k.a. sag studies) to determine if the emergency ratings can be utilized		AEP (100%)
b1445 Perform a sag study on the Addison (Buckeye CO-OP) – Thinever and North Crown City – Thivener 138 kV sag study and switch		AEP (100%)
b1446 Perform a sag study on the Parkersburg (Allegheny Power) – Belpre (AEP) 138 kV		AEP (100%)
b1447 Dexter – Elliot tap 138 kV sag check		AEP (100%)
b1448 Dexter – Meigs 138 kV Electrical Clearance Study		AEP (100%)
b1449 Meigs tap – Rutland 138 kV sag check		AEP (100%)
b1450 Muskingum – North Muskingum 138 kV sag check		AEP (100%)
b1451 North Newark – Sharp Road 138 kV sag check		AEP (100%)
b1452 North Zanesville – Zanesville 138 kV sag check		AEP (100%)
b1453 North Zanesville – Powelson and Ohio Central – Powelson 138 kV sag check		AEP (100%)
b1454 Perform an electrical clearance study on the Ross – Delano – Scioto Trail 138 kV line to determine if the emergency rating can be utilized		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1455	Perform a sag check on the Sunny – Canton Central – Wagenhals 138 kV line to determine if all circuits can be operated at their summer emergency rating		AEP (100%)
b1456	The Tidd – West Bellaire 345 kV circuit has been de-rated to its normal rating and would need an electrical clearance study to determine if the emergency rating can be utilized		AEP (100%)
b1457	The Tiltonsville – Windsor 138 kV circuit has been derated to its normal rating and would need an electrical clearance study to determine if the emergency rating could be utilized		AEP (100%)
b1458	Install three new 345 kV breakers at Bixby to separate the Marquis 345 kV line and transformer #2. Operate Circleville – Harrison 138 kV and Harrison – Zuber 138 kV up to conductor emergency ratings		AEP (100%)
b1459	Several circuits have been de-rated to their normal conductor ratings and could benefit from electrical clearance studies to determine if the emergency rating could be utilized		AEP (100%)
b1460	Replace 2156 & 2874 risers		AEP (100%)
b1461	Replace meter, metering CTs and associated equipment at the Paden City feeder		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1462	Replace relays at both South Cadiz 138 kV and Tidd 138 kV	AEP (100%)
b1463	Reconductor the Bexley – Groves 138 kV circuit	AEP (100%)
b1464	Corner 138 kV upgrades	AEP (100%)
b1465.1	Add a 3rd 2250 MVA 765/345 kV transformer at Sullivan station	AEC (0.71%) / AEP (75.06%) / APS (1.25%) / BGE (1.81%) / ComEd (5.91%) / Dayton (0.86%) / DL (1.23%) / DPL (0.95%) / Dominion (3.89%) / JCPL (1.58%) / NEPTUNE (0.15%) / HTP (0.07%) / PECO (2.08%) / PEPCO (1.66%) / ECP (0.07%)** / PSEG (2.62%) / RE (0.10%)
b1465.2	Replace the 100 MVAR 765 kV shunt reactor bank on Rockport – Jefferson 765 kV line with a 300 MVAR bank at Rockport Station	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> AEP (100%)

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<u>Required Transmission Enhancements</u>	<u>Annual Revenue Requirement</u>	<u>Responsible Customer(s)</u>
b1465.3	Transpose the Rockport – Sullivan 765 kV line and the Rockport – Jefferson 765 kV line	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (100%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1465.4	Make switching improvements at Sullivan and Jefferson 765 kV stations	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEP (100%)</u></p>
b1466.1	Create an in and out loop at Adams Station by removing the hard tap that currently exists	AEP (100%)
b1466.2	Upgrade the Adams transformer to 90 MVA	AEP (100%)
b1466.3	At Seaman Station install a new 138 kV bus and two new 138 kV circuit breakers	AEP (100%)
b1466.4	Convert South Central Co-op's New Market 69 kV Station to 138 kV	AEP (100%)
b1466.5	The Seaman – Highland circuit is already built to 138 kV, but is currently operating at 69 kV, which would now increase to 138 kV	AEP (100%)
b1466.6	At Highland Station, install a new 138 kV bus, three new 138 kV circuit breakers and a new 138/69 kV 90 MVA transformer	AEP (100%)
b1466.7	Using one of the bays at Highland, build a 138 kV circuit from Hillsboro – Highland 138 kV, which is approximately 3 miles	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1467.1	Install a 14.4 MVar Capacitor Bank at New Buffalo station	AEP (100%)
b1467.2	Reconfigure the 138 kV bus at LaPorte Junction station to eliminate a contingency resulting in loss of two 138 kV sources serving the LaPorte area	AEP (100%)
b1468.1	Expand Selma Parker Station and install a 138/69/34.5 kV transformer	AEP (100%)
b1468.2	Rebuild and convert 34.5 kV line to Winchester to 69 kV, including Farmland Station	AEP (100%)
b1468.3	Retire the 34.5 kV line from Haymond to Selma Wire	AEP (100%)
b1469.1	Conversion of the Newcomerstown – Cambridge 34.5 kV system to 69 kV operation	AEP (100%)
b1469.2	Expansion of the Derwent 69 kV Station (including reconfiguration of the 69 kV system)	AEP (100%)
b1469.3	Rebuild 11.8 miles of 69 kV line, and convert additional 34.5 kV stations to 69 kV operation	AEP (100%)
b1470.1	Build a new 138 kV double circuit off the Kanawha – Bailysville #2 138 kV circuit to Skin Fork Station	AEP (100%)
b1470.2	Install a new 138/46 kV transformer at Skin Fork	AEP (100%)
b1470.3	Replace 5 Moab's on the Kanawha – Baileysville line with breakers at the Sundial 138 kV station	AEP (100%)
b1471	Perform a sag study on the East Lima – For Lima – Rockhill 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1472	Perform a sag study on the East Lima – Haviland 138 kV line to increase the emergency rating		AEP (100%)
b1473	Perform a sag study on the East New Concord – Muskingum River section of the Muskingum River – West Cambridge 138 kV circuit		AEP (100%)
b1474	Perform a sag study on the Ohio Central – Prep Plant tap 138 kV circuit		AEP (100%)
b1475	Perform a sag study on the S73 – North Delphos 138 kV line to increase the emergency rating		AEP (100%)
b1476	Perform a sag study on the S73 – T131 138 kV line to increase the emergency rating		AEP (100%)
b1477	The Natrium – North Martin 138 kV circuit would need an electrical clearance study among other equipment upgrades		AEP (100%)
b1478	Upgrade Strouds Run – Strouds Tap 138 kV relay and riser		AEP (100%)
b1479	West Hebron station upgrades		AEP (100%)
b1480	Perform upgrades and a sag study on the Corner – Layman 138 kV section of the Corner – Muskingum River 138 kV circuit		AEP (100%)
b1481	Perform a sag study on the West Lima – Eastown Road – Rockhill 138 kV line and replace the 138 kV risers at Rockhill station to increase the emergency rating		AEP (100%)
b1482	Perform a sag study for the Albion – Robison Park 138 kV line to increase its emergency rating		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1483	Sag study 1 mile of the Clinch River – Saltville 138 kV line and replace the risers and bus at Clinch River, Lebanon, and Elk Garden Stations	AEP (100%)
b1484	Perform a sag study on the Hacienda – Harper 138 kV line to increase the emergency rating	AEP (100%)
b1485	Perform a sag study on the Jackson Road – Concord 183 kV line to increase the emergency rating	AEP (100%)
b1486	The Matt Funk – Poages Mill – Starkey 138 kV line requires	AEP (100%)
b1487	Perform a sag study on the New Carlisle – Trail Creek 138 kV line to increase the emergency rating	AEP (100%)
b1488	Perform a sag study on the Olive – LaPorte Junction 138 kV line to increase the emergency rating	AEP (100%)
b1489	A sag study must be performed for the 5.40 mile Tristate – Chadwick 138 kV line to determine if a higher emergency rating can be used	AEP (100%)
b1490.1	Establish a new 138/69 kV Butler Center station	AEP (100%)
b1490.2	Build a new 14 mile 138 kV line from Auburn station to Woods Road station VIA Butler Center station	AEP (100%)
b1490.3	Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer	AEP (100%)
b1490.4	Improve the switching arrangement at Kendallville station	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1491	Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line	AEP (100%)
b1492	Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR	AEP (100%)
b1493	Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating	AEP (100%)
b1494	Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to increase its emergency rating	AEP (100%)
b1495	Add an additional 765/345 kV transformer at Baker Station	AEC (0.41%) / AEP (87.22%) / BGE (1.03%) / ComEd (3.38%) / Dayton (1.23%) / DL (1.46%) / DPL (0.54%) / JCPL (0.90%) / NEPTUNE (0.09%) / HTP (0.04%) / PECO (1.18%) / PEPCO (0.94%) / ECP** (0.04%) / PSEG (1.48%) / RE (0.06%)
b1496	Replace 138 kV bus and risers at Johnson Mountain Station	AEP (100%)
b1497	Replace 138 kV bus and risers at Leesville Station	AEP (100%)
b1498	Replace 138 kV risers at Wurno Station	AEP (100%)
b1499	Perform a sag study on Sporn A – Gavin 138 kV to determine if the emergency rating can be improved	AEP (100%)
b1500	The North East Canton – Wagenhals 138 kV circuit would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1501	The Moseley – Reusens 138 kV circuit requires a sag study to determine if the emergency rating can be utilized to address a thermal loading issue for a category C3		AEP (100%)
b1502	Reconductor the Conesville East – Conesville Prep Plant Tap 138 kV section of the Conesville – Ohio Central to fix Reliability N-1-1 thermal overloads		AEP (100%)
b1659	Establish Sorenson 345/138 kV station as a 765/345 kV station		AEP (93.61%) / ATSI (2.99%) / ComEd (2.07%) / HTP (0.03%) / PENELEC (0.31%) / ECP** (0.03%) / PSEG (0.92%) / RE (0.04%)
b1659.1	Replace Sorenson 138 kV breaker 'L1'		AEP (100%)
b1659.2	Replace Sorenson 138 kV breaker 'L2' breaker		AEP (100%)
b1659.3	Replace Sorenson 138 kV breaker 'M1'		AEP (100%)
b1659.4	Replace Sorenson 138 kV breaker 'M2'		AEP (100%)
b1659.5	Replace Sorenson 138 kV breaker 'N1'		AEP (100%)
b1659.6	Replace Sorenson 138 kV breaker 'N2'		AEP (100%)
b1659.7	Replace Sorenson 138 kV breaker 'O1'		AEP (100%)
b1659.8	Replace Sorenson 138 kV breaker 'O2'		AEP (100%)
b1659.9	Replace Sorenson 138 kV breaker 'M'		AEP (100%)
b1659.10	Replace Sorenson 138 kV breaker 'N'		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1659.11	Replace Sorenson 138 kV breaker 'O'	AEP (100%)
b1659.12	Replace McKinley 138 kV breaker 'L1'	AEP (100%)
b1659.13	Establish 765 kV yard at Sorenson and install four 765 kV breakers	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPSCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (74.58%) / Dayton (7.99%) / DEOK (17.43%)</u>
b1659.14	Build approximately 14 miles of 765 kV line from existing Dumont - Marysville line	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPSCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (63.61%) / ATSI (22.53%) / ComEd (0.01%) / Dayton (6.83%) / DL (7.02%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1660	Install a 765/500 kV transformer at Cloverdale	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (33.80%) / BGE (26.47%) / PEPCO (39.73%)</u></p>
b1661	Install a 765 kV circuit breaker at Wyoming station	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEP (100%)</u></p>
b1662	Rebuild 4 miles of 46 kV line to 138 kV from Pemberton to Cherry Creek	AEP (100%)
b1662.1	Circuit Breakers are installed at Cherry Creek (facing Pemberton) and at Pemberton (facing Tams Mtn. and Cherry Creek)	AEP (100%)
b1662.2	Install three 138 kV breakers at Grandview Station (facing Cherry Creek, Hinton, and Bradley Stations)	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1662.3	Remove Sullivan Switching Station (46 kV)	AEP (100%)
b1663	Install a new 765/138 kV transformer at Jackson Ferry substation	AEP (100%)
b1663.1	Establish a new 10 mile double circuit 138 kV line between Jackson Ferry and Wythe	AEP (100%)
b1663.2	Install 2 765 kV circuit breakers, breaker disconnect switches and associated bus work for the new 765 kV breakers, and new relays for the 765 kV breakers at Jackson's Ferry	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (100%)</u>
b1664	Install switched capacitor banks at Kenwood 138 kV stations	AEP (100%)
b1665	Install a second 138/69 kV transformer at Thelma station	AEP (100%)
b1665.1	Construct a single circuit 69 kV line from West Paintsville to the new Paintsville station	AEP (100%)
b1665.2	Install new 7.2 MVAR, 46 kV bank at Kenwood Station	AEP (100%)
b1666	Build an 8 breaker 138 kV station tapping both circuits of the Fostoria - East Lima 138 kV line	AEP (90.65%) / Dayton (9.35%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1667	Establish Melmore as a switching station with both 138 kV circuits terminating at Melmore. Extend the double circuit 138 kV line from Melmore to Fremont Center	AEP (100%)
b1668	Revise the capacitor setting at Riverside 138 kV station	AEP (100%)
b1669	Capacitor setting changes at Ross 138 kV stations	AEP (100%)
b1670	Capacitor setting changes at Wooster 138 kV station	AEP (100%)
b1671	Install four 138 kV breakers in Danville area	AEP (100%)
b1676	Replace Natrium 138 kV breaker 'G (rehab)'	AEP (100%)
b1677	Replace Huntley 138 kV breaker '106'	AEP (100%)
b1678	Replace Kammer 138 kV breaker 'G'	AEP (100%)
b1679	Replace Kammer 138 kV breaker 'H'	AEP (100%)
b1680	Replace Kammer 138 kV breaker 'J'	AEP (100%)
b1681	Replace Kammer 138 kV breaker 'K'	AEP (100%)
b1682	Replace Kammer 138 kV breaker 'M'	AEP (100%)
b1683	Replace Kammer 138 kV breaker 'N'	AEP (100%)
b1684	Replace Clinch River 138 kV breaker 'E1'	AEP (100%)
b1685	Replace Lincoln 138 kV breaker 'D'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1687	Advance s0251.7 (Replace Corrid 138 kV breaker '104S')	AEP (100%)
b1688	Advance s0251.8 (Replace Corrid 138 kV breaker '104C')	AEP (100%)
b1712.1	Perform sag study on Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1712.2	Rebuild the Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1733	Perform a sag study of the Bluff Point - Jauby 138 kV line. Upgrade breaker, wavetrapp, and risers at the terminal ends	AEP (100%)
b1734	Perform a sag study of Randolph - Hodgins 138 kV line. Upgrade terminal equipment	AEP (100%)
b1735	Perform a sag study of R03 - Magely 138 kV line. Upgrade terminal equipment	AEP (100%)
b1736	Perform a sag study of the Industrial Park - Summit 138 kV line	AEP (100%)
b1737	Sag study of Newcomerstown - Hillview 138 kV line. Upgrade - terminal equipment	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1738	Perform a sag study of the Wolf Creek - Layman 138 kV line. - Upgrade terminal equipment including a 138 kV breaker and wavetrap	AEP (100%)
b1739	Perform a sag study of the Ohio Central - West Trinway 138 kV line	AEP (100%)
b1741	Replace Beatty 138 kV breaker '2C(IPP)'	AEP (100%)
b1742	Replace Beatty 138 kV breaker '1E'	AEP (100%)
b1743	Replace Beatty 138 kV breaker '2E'	AEP (100%)
b1744	Replace Beatty 138 kV breaker '3C'	AEP (100%)
b1745	Replace Beatty 138 kV breaker '2W'	AEP (100%)
b1746	Replace St. Claire 138 kV breaker '8'	AEP (100%)
b1747	Replace Cloverdale 138 kV breaker 'C'	AEP (100%)
b1748	Replace Cloverdale 138 kV breaker 'D1'	AEP (100%)
b1780	Install two 138kV breakers and two 138kV circuit switchers at South Princeton Station and one 138kV breaker and one 138kV circuit switcher at Switchback Station	AEP (100%)
b1781	Install three 138 kV breakers and a 138kV circuit switcher at Trail Fork Station in Pineville, WV	AEP (100%)
b1782	Install a 46kV Moab at Montgomery Station facing Carbondale (on the London - Carbondale 46 kV circuit)	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1783	Add two 138 kV Circuit Breakers and two 138 kV circuit switchers on the Lonesome Pine - South Bluefield 138 kV line	AEP (100%)
b1784	Install a 52.8 MVAR capacitor bank at the Clifford 138 kV station	AEP (100%)
b1811.1	Perform a sag study of 4 miles of the Waterford - Muskingum line	AEP (100%)
b1811.2	Rebuild 0.1 miles of Waterford - Muskingum 345 kV with 1590 ACSR	AEP (100%)
b1812	Reconductor the AEP portion of the South Canton - Harmon 345 kV with 954 ACSR and upgrade terminal equipment at South Canton. Expected rating is 1800 MVA S/N and 1800 MVA S/E	AEP (100%)
b1817	Install (3) 345 kV circuit breakers at East Elkhart station in ring bus designed as a breaker and half scheme	AEP (100%)
b1818	Expand the Allen station by installing a second 345/138 kV transformer and adding four 138 kV exits by cutting in the Lincoln - Sterling and Milan - Timber Switch 138 kV double circuit tower line	AEP (88.30%) / ATSI (8.86%) / Dayton (2.84%)
b1819	Rebuild the Robinson Park - Sorenson 138 kV line corridor as a 345 kV double circuit line with one side operated at 345 kV and one side at 138 kV	AEP (87.18%) / ATSI (10.06%) / Dayton (2.76%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1859 Perform a sag study for Hancock - Cave Spring - Roanoke 138 kV circuit to reach new SE ratings of 272MVA (Cave Spring-Hancock), 205MVA (Cave Spring-Sunscape), 245MVA (ROANO2-Sunscape)		AEP (100%)
b1860 Perform a sag study on the Crooksville - Spencer Ridge section (14.3 miles) of the Crooksville-Poston-Strouds Run 138 kV circuit to see if any remedial action needed to reach the SE rating (175MVA)		AEP (100%)
b1861 Reconductor 0.83 miles of the Dale - West Canton 138 kV Tie-line and upgrade risers at West Canton 138 kV		AEP (100%)
b1862 Perform a sag study on the Grant - Greentown 138 kV circuit and replace the relay CT at Grant 138 kV station to see if any remedial action needed to reach the new ratings of 251/286MVA		AEP (100%)
b1863 Perform a sag study of the Kammer - Wayman SW 138 kV line to see if any remedial action needed to reach the new SE rating of 284MVA		AEP (100%)
b1864.1 Add two additional 345/138 kV transformers at Kammer		AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.2 Add second West Bellaire - Brues 138 kV circuit		AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.3 Replace Kammer 138 kV breaker 'E'		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1865	Perform a sag study on the Kanawha - Carbondale 138 kV line to see if any remedial action needed to reach the new ratings of 251/335MVA	AEP (100%)
b1866	Perform a sag study on the Clinch River-Lock Hart-Dorton 138kV line,increase the Relay Compliance Trip Limit at Clinch River on the C.R.-Dorton 138kV line to 310 and upgrade the risers with 1590ACSR	AEP (100%)
b1867	Perform a sag study on the Newcomerstown - South Coshocton 138 kV line to see if any remedial action is needed to reach the new SE rating of 179MVA	AEP (100%)
b1868	Perform sag study on the East Lima - new Liberty 138 kV line to see if any remedial action is needed to reach the new SE rating of 219MVA	AEP (100%)
b1869	Perform a sag study of the Ohio Central - South Coshocton 138 kV circuit to see if any remedial action needed to reach the new SE ratings of 250MVA	AEP (100%)
b1870	Replace the Ohio Central transformer #1 345/138/12 kV 450 MVA for a 345/138/34.5 kV 675 MVA transformer	AEP (68.16%) / ATSI (25.27%) / Dayton (3.88%) / PENELEC (1.59%) / DEOK (1.10%)
b1871	Perform a sag study on the Central - West Coshocton 138 kV line (improving the emergency rating of this line to 254 MVA)	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1872 Add a 57.6 MVar capacitor bank at East Elkhart 138 kv station in Indiana		AEP (100%)
b1873 Install two 138 kV circuit breakers at Cedar Creek Station and primary side circuit switcher on the 138/69/46 kV transformer		AEP (100%)
b1874 Install two 138 kV circuit breakers and one 138 kV circuit switcher at Magely 138 kV station in Indiana		AEP (100%)
b1875 Build 25 miles of new 138 kV line from Bradley Station through Tower 117 Station and terminating at McClung 138 kV station. Existing 69 kV distribution transformers will be replaced with 138 kV transformers		AEP (100%)
b1876 Install a 14.4 MVar capacitor bank at Capital Avenue (AKA Currant Road) 34.5 kV bus		AEP (100%)
b1877 Relocate 138 kV Breaker G to the West Kingsport - Industry Drive 138 kV line and Remove 138 kV MOAB		AEP (100%)
b1878 Perform a sag study on the Lincoln - Robinson Park 138 kV line (Improve the emergency rating to 244 MVA)		AEP (100%)
b1879 Perform a sag study on the Hansonville - Meadowview 138 kV line (Improve the emergency rating to 245 MVA)		AEP (100%)
b1880 Rebuild the 15 miles of the Moseley - Roanoke 138 kV line. This project would consist of rebuilding both circuits on the double circuit line		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1881	Replace existing 600 Amp switches, station risers and increase the CT ratios associated with breaker 'G' at Sterling 138 kV Station. It will increase the rating to 296 MVA S/N and 384 MVA S/E	AEP (100%)
b1882	Perform a sag study on the Bluff Point - Randolph 138 kV line to see if any remedial action needed to reach the new SE rating of 255 MVA	AEP (100%)
b1883	Switch the breaker position of transformer #1 and SW Lima at East Lima 345 kV bus	AEP (100%)
b1884	Perform a sag study on Strawton station - Fisher Body - Deer Creek 138 kV line to see if any remedial action needed to reach the new SE rating of 250 MVA	AEP (100%)
b1887	Establish a new 138/69 kV source at Carrollton and construct two new 69 kV lines from Carrollton to tie into the Dennison - Miller SW 69 kV line and to East Dover 69 kV station respectively	AEP (100%)
b1888	Install a 69 kV line breaker at Blue Pennant 69 kV Station facing Bim Station and 14.4 MVAR capacitor bank	AEP (100%)
b1889	Install a 43.2 MVAR capacitor bank at Hinton 138 kV station (APCO WV)	AEP (100%)
b1901	Rebuild the Ohio Central - West Trinway (4.84 miles) section of the Academia - Ohio Central 138 kV circuit. Upgrade the Ohio Central riser, Ohio Central switch and the West Trinway riser	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1904.1	Construct new 138/69 Michiana Station near Bridgman by tapping the new Carlisle - Main Street 138 kV and the Bridgman - Buchanan Hydro 69 kV line	AEP (100%)
b1904.2	Establish a new 138/12 kV New Galien station by tapping the Olive - Hickory Creek 138 kV line	AEP (100%)
b1904.3	Retire the existing Galien station and move its distribution load to New Galien station. Retire the Buchanan Hydro - New Carlisle 34.5 kV line	AEP (100%)
b1904.4	Implement an in and out scheme at Cook 69 kV by eliminating the Cook 69 kV tap point and by installing two new 69 kV circuit breakers	AEP (100%)
b1904.5	Rebuild the Bridgman - Cook 69 kV and the Derby - Cook 69 kV lines	AEP (100%)
b1946	Perform a sag study on the Brues – West Bellaire 138 kV line	AEP (100%)
b1947	A sag study of the Dequine - Meadowlake 345 kV line #1 line may improve the emergency rating to 1400 MVA	AEP (100%)
b1948	Establish a new 765/345 interconnection at Sporn. Install a 765/345 kV transformer at Mountaineer and build ¾ mile of 345 kV to Sporn	ATSI (61.08%) / DL (21.87%) / Dominion (13.97%) / PENELEC (3.08%)
b1949	Perform a sag study on the Grant Tap – Deer Creek 138 kV line and replace bus and risers at Deer Creek station	AEP (100%)
b1950	Perform a sag study on the Kammer – Ormet 138 kV line of the conductor section	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1951	Perform a sag study of the Maddox- Convoy 345 kV line to improve the emergency rating to 1400 MVA		AEP (100%)
b1952	Perform a sag study of the Maddox – T130 345 kV line to improve the emergency rating to 1400 MVA		AEP (100%)
b1953	Perform a sag study of the Meadowlake - Olive 345 kV line to improve the emergency rating to 1400 MVA		AEP (100%)
b1954	Perform a sag study on the Milan - Harper 138 kV line and replace bus and switches at Milan Switch station		AEP (100%)
b1955	Perform a sag study of the R-049 - Tillman 138 kV line may improve the emergency rating to 245 MVA		AEP (100%)
b1956	Perform a sag study of the Tillman - Dawkins 138 kV line may improve the emergency rating to 245 MVA		AEP (100%)
b1957	Terminate Transformer #2 at SW Lima in a new bay position		AEP (69.41%) / ATSI (23.11%) / ECP** (0.17%) / HTP (0.19%) / PENELEC (2.42%) / PSEG (4.52%) / RE (0.18%)
b1958	Perform a sag study on the Brookside - Howard 138 kV line and replace bus and risers at AEP Howard station		AEP (100%)
b1960	Sag Study on 7.2 miles SE Canton-Canton Central 138kV ckt		AEP (100%)
b1961	Sag study on the Southeast Canton – Sunnyside 138kV line		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1962	Add four 765 kV breakers at Kammer	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEP (100%)</p>
b1963	Build approximately 1 mile of circuit comprising of 2-954 ACSR to get the rating of Waterford-Muskinum 345 kV higher	AEP (100%)
b1970	Reconductor 13 miles of the Kammer – West Bellaire 345kV circuit	APS (33.51%) / ATSI (32.21%) / DL (18.64%) / Dominion (6.01%) / ECP** (0.10%) / HTP (0.11%) / JCPL (1.68%) / Neptune* (0.18%) / PENELEC (4.58%) / PSEG (2.87%) / RE (0.11%)
b1971	Perform a sag study to improve the emergency rating on the Bridgville – Chandlersville 138 kV line	AEP (100%)
b1972	Replace disconnect switch on the South Canton 765/345 kV transformer	AEP (100%)
b1973	Perform a sag study to improve the emergency rating on the Carrollton – Sunnyside 138 kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1974	Perform a sag study to improve the emergency rating on the Bethel Church – West Dover 138 kV line	AEP (100%)
b1975	Replace a switch at South Millersburg switch station	AEP (100%)
b2017	Reconductor or rebuild Sporn - Waterford - Muskingum River 345 kV line	ATSI (37.04%) / AEP (34.35%) / DL (10.41%) / Dominion (6.19%) / APS (3.94%) / PENELEC (3.09%) / JCPL (1.39%) / Dayton (1.20%) / Neptune* (0.14%) / HTP (0.09%) / ECP** (0.08%) / PSEG (2.00%) / RE (0.08%)
b2018	Loop Conesville - Bixby 345 kV circuit into Ohio Central	ATSI (58.58%) / AEP (14.16%) / APS (12.88%) / DL (7.93%) / PENELEC (5.73%) / Dayton (0.72%)
b2019	Establish Burger 345/138 kV station	AEP (93.74%) / APS (4.40%) / DL (1.11%) / ATSI (0.74%) / PENELEC (0.01%)
b2020	Rebuild Amos - Kanawah River 138 kV corridor	AEP (88.39%) / APS (7.12%) / ATSI (2.89%) / DEOK (1.58%) / PEPCO (0.02%)
b2021	Add 345/138 transformer at Sporn, Kanawah River & Muskingum River stations	AEP (91.92%) / DEOK (3.60%) / APS (2.19%) / ATSI (1.14%) / DL (1.08%) / PEPCO (0.04%) / BGE (0.03%)
b2021.1	Replace Kanawah 138 kV breaker 'L'	AEP (100%)
b2021.2	Replace Muskingum 138 kV breaker 'HG'	AEP (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2021.3	Replace Muskingum 138 kV breaker 'HJ'		AEP (100%)
b2021.4	Replace Muskingum 138 kV breaker 'HE'		AEP (100%)
b2021.5	Replace Muskingum 138 kV breaker 'HD'		AEP (100%)
b2021.6	Replace Muskingum 138 kV breaker 'HF'		AEP (100%)
b2021.7	Replace Muskingum 138 kV breaker 'HC'		AEP (100%)
b2021.8	Replace Sporn 138 kV breaker 'D1'		AEP (100%)
b2021.9	Replace Sporn 138 kV breaker 'D2'		AEP (100%)
b2021.10	Replace Sporn 138 kV breaker 'F1'		AEP (100%)
b2021.11	Replace Sporn 138 kV breaker 'F2'		AEP (100%)
b2021.12	Replace Sporn 138 kV breaker 'G'		AEP (100%)
b2021.13	Replace Sporn 138 kV breaker 'G2'		AEP (100%)
b2021.14	Replace Sporn 138 kV breaker 'N1'		AEP (100%)
b2021.15	Replace Kanawah 138 kV breaker 'M'		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2022	Terminate Tristate - Kyger Creek 345 kV line at Sporn	AEP (97.99%) / DEOK (2.01%)
b2027	Perform a sag study of the Tidd - Collier 345 kV line	AEP (100%)
b2028	Perform a sag study on East Lima - North Woodcock 138 kV line to improve the rating	AEP (100%)
b2029	Perform a sag study on Bluebell - Canton Central 138 kV line to improve the rating	AEP (100%)
b2030	Install 345 kV circuit breakers at West Bellaire	AEP (100%)
b2031	Sag study on Tilton - W. Bellaire section 1 (795 ACSR), about 12 miles	AEP (100%)
b2032	Rebuild 138 kV Elliot tap - Poston line	ATSI (73.02%) / Dayton (19.39%) / DL (7.59%)
b2033	Perform a sag study of the Brues - W. Bellaire 138 kV line	AEP (100%)
b2046	Adjust tap settings for Muskingum River transformers	AEP (100%)
b2047	Replace relay at Greenlawn	AEP (100%)
b2048	Replace both 345/138 kV transformers with one bigger transformer	AEP (92.49%) / Dayton (7.51%)
b2049	Replace relay	AEP (100%)
b2050	Perform sag study	AEP (100%)
b2051	Install 3 138 kV breakers and a circuit switcher at Dorton station	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2052	Replace transformer		AEP (67.17%) / ATSI (27.37%) / Dayton (3.73%) / PENELEC (1.73%)
b2054	Perform a sag study of Sporn - Rutland 138 kV line		AEP (100%)
b2069	Replace George Washington 138 kV breaker 'A' with 63kA rated breaker		AEP (100%)
b2070	Replace Harrison 138 kV breaker '6C' with 63kA rated breaker		AEP (100%)
b2071	Replace Lincoln 138 kV breaker 'L' with 63kA rated breaker		AEP (100%)
b2072	Replace Natrum 138 kV breaker 'T' with 63kA rated breaker		AEP (100%)
b2073	Replace Darrah 138 kV breaker 'B' with 63kA rated breaker		AEP (100%)
b2074	Replace Wyoming 138 kV breaker 'G' with 80kA rated breaker		AEP (100%)
b2075	Replace Wyoming 138 kV breaker 'G1' with 80kA rated breaker		AEP (100%)
b2076	Replace Wyoming 138 kV breaker 'G2' with 80kA rated breaker		AEP (100%)
b2077	Replace Wyoming 138 kV breaker 'H' with 80kA rated breaker		AEP (100%)
b2078	Replace Wyoming 138 kV breaker 'H1' with 80kA rated breaker		AEP (100%)
b2079	Replace Wyoming 138 kV breaker 'H2' with 80kA rated breaker		AEP (100%)
b2080	Replace Wyoming 138 kV breaker 'J' with 80kA rated breaker		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2081	Replace Wyoming 138 kV breaker 'J1' with 80kA rated breaker		AEP (100%)
b2082	Replace Wyoming 138 kV breaker 'J2' with 80kA rated breaker		AEP (100%)
b2083	Replace Natrum 138 kV breaker 'K' with 63kA rated breaker		AEP (100%)
b2084	Replace Tanner Creek 345 kV breaker 'P' with 63kA rated breaker		AEP (100%)
b2085	Replace Tanner Creek 345 kV breaker 'P2' with 63kA rated breaker		AEP (100%)
b2086	Replace Tanner Creek 345 kV breaker 'Q1' with 63kA rated breaker		AEP (100%)
b2087	Replace South Bend 138 kV breaker 'T' with 63kA rated breaker		AEP (100%)
b2088	Replace Tidd 138 kV breaker 'L' with 63kA rated breaker		AEP (100%)
b2089	Replace Tidd 138 kV breaker 'M2' with 63kA rated breaker		AEP (100%)
b2090	Replace McKinley 138 kV breaker 'A' with 40kA rated breaker		AEP (100%)
b2091	Replace West Lima 138 kV breaker 'M' with 63kA rated breaker		AEP (100%)
b2092	Replace George Washington 138 kV breaker 'B' with 63kA rated breaker		AEP (100%)
b2093	Replace Turner 138 kV breaker 'W' with 63kA rated breaker		AEP (100%)
b2135	Build a new 138 kV line from Falling Branch to Merrimac and add a 138/69 kV transformer at Merrimac Station		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2160	Add a fourth circuit breaker to the station being built for the U4-038 project (Conelley), rebuild U4-038 - Grant Tap line as double circuit tower line	AEP (100%)
b2161	Rebuild approximately 20 miles of the Allen - S073 double circuit 138 kV line (with one circuit from Allen - Tillman - Timber Switch - S073 and the other circuit from Allen - T-131 - S073) utilizing 1033 ACSR	AEP (100%)
b2162	Perform a sag study to improve the emergency rating of the Belpre - Degussa 138 kV line	AEP (100%)
b2163	Replace breaker and wavetrap at Jay 138 kV station	AEP (100%)

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## SCHEDULE 12 – APPENDIX

### (20) Virginia Electric and Power Company

Required Transmission Enhancements		Annual Revenue Requirement*** Responsible Customer(s)	
b0217	Upgrade Mt. Storm - Doubs 500kV		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>APS (19.55%) / BGE (15.30%) / Dominion (48.38%) / PEPCO (16.77%)</u>
b0222	Install 150 MVAR capacitor at Loudoun 500 kV		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>BGE (7.93%) / Dominion (76.09%) / PEPCO (15.98%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

\*\*\* The Annual Revenue Requirement for all Virginia Electric and Power Company projects in this Section 20 shall be as specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B.

**Virginia Electric and Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0223	Install 150 MVAR capacitor at Asburn 230 kV	Dominion (100%)
b0224	Install 150 MVAR capacitor at Dranesville 230 kV	Dominion (100%)
b0225	Install 33 MVAR capacitor at Possum Pt. 115 kV	Dominion (100%)
b0226	Install 500/230 kV transformer at Clifton and Clifton 500 kV 150 MVAR capacitor	As specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B APS (3.69%) / BGE (3.54%) / Dominion (85.73%) / PEPSCO (7.04%)
b0227	Install 500/230 kV transformer at Bristers; build new 230 kV Bristers-Gainsville circuit, upgrade two Loudoun-Brambleton circuits	AEC (0.71%) / APS (3.35%) / BGE (10.92%) / ConEd (0.10%) / DPL (1.66%) / Dominion (67.31%) / ME (0.89%) / PECO (2.33%) / PEPSCO (12.19%) / PPL (0.54%)
b0227.1	Loudoun Sub – upgrade 6-230 kV breakers	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0231	Install 500 kV breakers & 500 kV bus work at Suffolk	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  Dominion (100%)</p>
b0231.2	Install 500/230 kV Transformer, 230 kV breakers, & 230 kV bus work at Suffolk	Dominion (100%)
b0232	Install 150 MVAR capacitor at Lynnhaven 230 kV	Dominion (100%)
b0233	Install 150 MVAR capacitor at Landstown 230 kV	Dominion (100%)
b0234	Install 150 MVAR capacitor at Greenwich 230 kV	Dominion (100%)
b0235	Install 150 MVAR capacitor at Fentress 230 kV	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0307	Reconductor Endless Caverns – Mt. Jackson 115 kV		Dominion (100%)
b0308	Replace L breaker and switches at Endless Caverns 115 kV		Dominion (100%)
b0309	Install SPS at Earleys 115 kV		Dominion (100%)
b0310	Reconductor Club House – South Hill and Chase City – South Hill 115 kV		Dominion (100%)
b0311	Reconductor Idylwood to Arlington 230 kV		Dominion (100%)
b0312	Reconductor Gallows to Ox 230 kV		Dominion (100%)
b0325	Install a 2 <sup>nd</sup> Everetts 230/115 kV transformer		Dominion (100%)
b0326	Uprate/resag Remington-Brandywine-Culppr 115 kV		Dominion (100%)
b0327	Build 2 <sup>nd</sup> Harrisonburg – Valley 230 kV		APS (19.79%) / Dominion (76.18%) / PEPCO (4.03%)
b0328.1	Build new Meadow Brook – Loudoun 500 kV circuit (30 of 50 miles)		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>BGE (7.93%) / Dominion (76.09%) / PEPCO (15.98%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.3	Upgrade Mt. Storm 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (30.37%) / Dominion</u> <u>(46.46%) / PEPCO (23.17%)</u>
b0328.4	Upgrade Loudoun 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>BGE (7.93%) / Dominion</u> <u>(76.09%) / PEPCO (15.98%)</u>

\* Neptune Regional Transmission System, LLC

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit	Dominion (100%)††
b0329.1	Replace Thole Street 115 kV breaker ‘48T196’	Dominion (100%)
b0329.2	Replace Chesapeake 115 kV breaker ‘T242’	Dominion (100%)
b0329.3	Replace Chesapeake 115 kV breaker ‘8722’	Dominion (100%)
b0329.4	Replace Chesapeake 115 kV breaker ‘16422’	Dominion (100%)
b0330	Install Crewe 115 kV breaker and shift load from line 158 to 98	Dominion (100%)
b0331	Upgrade/resag Shell Bank – Whealton 115 kV (Line 165)	Dominion (100%)

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† Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

†† Cost allocations associated with below 500 kV elements of the project

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0332	Uprate/resag Chesapeake – Cradock 115 kV		Dominion (100%)
b0333	Replace wave trap on Elmont – Replace (Line #231)		Dominion (100%)
b0334	Uprate/resag Iron Bridge-Walmsley-Southwest 230 kV		Dominion (100%)
b0335	Build Chase City – Clarksville 115 kV		Dominion (100%)
b0336	Reconductor one span of Chesapeake – Dozier 115 kV close to Dozier substation		Dominion (100%)
b0337	Build Lexington 230 kV ring bus		Dominion (100%)
b0338	Replace Gordonsville 230/115 kV transformer for larger one		Dominion (100%)
b0339	Install Breaker at Doods 230 kV Sub		Dominion (100%)
b0340	Reconductor one span Peninsula – Magruder 115 kV close to Magruder substation		Dominion (100%)
b0341	Install a breaker at Northern Neck 115 kV		Dominion (100%)
b0342	Replace Trowbridge 230/115 kV transformer		Dominion (100%)
b0403	2 <sup>nd</sup> Doods 500/230 kV transformer addition		APS (3.35%) / BGE (4.22%) / DPL (1.10%) / Dominion (83.94%) / PEPCO (7.39%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0412	Retension Pruntytown – Mt. Storm 500 kV to a 3502 MVA rating		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (20.86%) / BGE (24.68%) / PEPCO (54.46%)</u></p>
b0450	Install 150 MVAR Capacitor at Fredricksburg 230 kV		Dominion (100%)
b0451	Install 25 MVAR Capacitor at Somerset 115 kV		Dominion (100%)
b0452	Install 150 MVAR Capacitor at Northwest 230 kV		Dominion (100%)
b0453.1	Convert Remington – Sowego 115 kV to 230 kV		APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.2	Add Sowego – Gainsville 230 kV		APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.3	Add Sowego 230/115 kV transformer		APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0454	Reconductor 2.4 miles of Newport News – Chuckatuck 230 kV		Dominion (100%)
b0455	Add 2 <sup>nd</sup> Endless Caverns 230/115 kV transformer		APS (32.70%) / BGE (7.01%) / DPL (1.80%) / Dominion (50.82%) / PEPCO (7.67%)
b0456	Reconductor 9.4 miles of Edinburg – Mt. Jackson 115 kV		APS (33.69%) / BGE (12.18%) / Dominion (40.08%) / PEPCO (14.05%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0457	Replace both wave traps on Dooms – Lexington 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>DEOK (0.06%) / Dominion (80.28%)</u> <u>/ PEPCO (19.66%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0467.2	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.66%) / BGE (22.09%) / ConEd (0.18%) / DPL (3.69%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.53%) / PEPCO (41.78%) / PPL (2.07%)
b0492.6	Replace Mount Storm 500 kV breaker 55072	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0492.7	Replace Mount Storm 500 kV breaker 55172	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.8	Replace Mount Storm 500 kV breaker H1172-2	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.9	Replace Mount Storm 500 kV breaker G2T550	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS</u>  <u>(9.22%) / BGE (4.41%) / DL</u>  <u>(0.02%) / DPL (6.88%) / Dominion</u>  <u>(10.77%) / ECP (0.44%) / JCPL</u>  <u>(11.59%) / ME (2.93%) /</u>  <u>NEPTUNE (1.11%) / PECO</u>  <u>(14.45%) / PEPCO (6.08%) / PPL</u>  <u>(6.36%) / PSEG (15.79%) / RE</u>  <u>(0.59%)</u></p>
b0492.10	Replace Mount Storm 500 kV breaker G2T554	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS</u>  <u>(9.22%) / BGE (4.41%) / DL</u>  <u>(0.02%) / DPL (6.88%) / Dominion</u>  <u>(10.77%) / ECP (0.44%) / JCPL</u>  <u>(11.59%) / ME (2.93%) /</u>  <u>NEPTUNE (1.11%) / PECO</u>  <u>(14.45%) / PEPCO (6.08%) / PPL</u>  <u>(6.36%) / PSEG (15.79%) / RE</u>  <u>(0.59%)</u></p>

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.11	Replace Mount Storm 500 kV breaker G1T551	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.12	Upgrade nameplate rating of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0512.5	Advance n0716 (Ox - Replace 230kV breaker L242)		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.6	Advance n0717 (Possum Point - Replace 230kV breaker SC192)		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0583	Install dual primary protection schemes on Gosport lines 62 and 51 at the remote terminals (Chesapeake on the 62 line and Reeves Ave on the 51 line)		Dominion (100%)
b0756	Install a second 500/115 kV autotransformer at Chancellor 500 kV		Dominion (100%)
b0756.1	Install two 500 kV breakers at Chancellor 500 kV		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>Dominion (100%)</u>
b0757	Reconductor one mile of Chesapeake – Reeves Avenue 115 kV line		Dominion (100%)
b0758	Install a second Fredericksburg 230/115 kV autotransformer		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0759	Build a second Doods – Dupont – Waynesboro 115 kV line		Dominion (100%)
b0760	Build 115 kV line from Kitty Hawk to Colington 115 kV (Colington on the existing line and Nag's Head and Light House DP on new line)		Dominion (100%)
b0761	Install a second 230/115 kV transformer at Possum Point		Dominion (100%)
b0762	Build a new Elko station and transfer load from Turner and Providence Forge stations		Dominion (100%)
b0763	Rebuild 17.5 miles of the line for a new summer rating of 262 MVA		Dominion (100%)
b0764	Increase the rating on 2.56 miles of the line between Greenwich and Thompson Corner; new rating to be 257 MVA		Dominion (100%)
b0765	Add a second Bull Run 230/115 kV autotransformer		Dominion (100%)
b0766	Increase the rating of the line between Loudoun and Cedar Grove to at least 150 MVA		Dominion (100%)
b0767	Extend the line from Old Church – Chickahominy 230 kV		Dominion (100%)
b0768	Loop line #251 Idylwood – Arlington into the GIS sub		Dominion (100%)
b0769	Re-tension 15 miles of the line for a new summer rating of 216 MVA		Dominion (100%)
b0770	Add a second 230/115 kV autotransformer at Lanexa		Dominion (100%)
b0770.1	Replace Lanexa 115 kV breaker '8532'		Dominion (100%)
b0770.2	Replace Lanexa 115 kV breaker '9232'		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0771	Build a parallel Chickahominy – Lanexa 230 kV line		Dominion (100%)
b0772	Install a second Elmont 230/115 kV autotransformer		Dominion (100%)
b0772.1	Replace Elmont 115 kV breaker ‘7392’		Dominion (100%)
b0774	Install a 33 MVAR capacitor at Bremo 115 kV		Dominion (100%)
b0775	Reconductor the Greenwich – Virginia Beach line to bring it up to a summer rating of 261 MVA; Reconductor the Greenwich – Amphibious Base line to bring it up to 291 MVA		Dominion (100%)
b0776	Re-build Trowbridge – Winfall 115 kV		Dominion (100%)
b0777	Terminate the Thelma – Carolina 230 kV circuit into Lakeview 230 kV		Dominion (100%)
b0778	Install 29.7 MVAR capacitor at Lebanon 115 kV		Dominion (100%)
b0779	Build a new 230 kV line from Yorktown to Hayes but operate at 115 kV initially		Dominion (100%)
b0780	Reconductor Chesapeake – Yadkin 115 kV line		Dominion (100%)
b0781	Reconductor and replace terminal equipment on line 17 and replace the wave trap on line 88		Dominion (100%)
b0782	Install a new 115 kV capacitor at Dupont Waynesboro substation		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0784	Replace wave traps on North Anna to Ladysmith 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>Dominion (100%)</u></b></p>
b0785	Rebuild the Chase City – Crewe 115 kV line	Dominion (100%)
b0786	Reconductor the Moran DP – Crewe 115 kV segment	Dominion (100%)
b0787	Upgrade the Chase City – Twitty's Creek 115 kV segment	Dominion (100%)
b0788	Reconductor the line from Farmville – Pamplin 115 kV	Dominion (100%)
b0793	Close switch 145T183 to network the lines. Rebuild the section of the line #145 between Possum Point – Minnieville DP 115 kV	Dominion (100%)
b0815	Replace Elmont 230 kV breaker '22192'	Dominion (100%)
b0816	Replace Elmont 230 kV breaker '21692'	Dominion (100%)
b0817	Replace Elmont 230 kV breaker '200992'	Dominion (100%)
b0818	Replace Elmont 230 kV breaker '2009T2032'	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0837	At Mt. Storm, replace the existing MOD on the 500 kV side of the transformer with a circuit breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b0888	Replace Loudoun 230 kV Cap breaker 'SC352'	Dominion (100%)
b0892	Replace Chesapeake 115 kV breaker SX522	Dominion (100%)
b0893	Replace Chesapeake 115 kV breaker T202	Dominion (100%)
b0894	Replace Possum Point 115 kV breaker SX-32	Dominion (100%)
b0895	Replace Possum Point 115 kV breaker L92-1	Dominion (100%)
b0896	Replace Possum Point 115 kV breaker L92-2	Dominion (100%)
b0897	Replace Suffolk 115 kV breaker T202	Dominion (100%)
b0898	Replace Peninsula 115 kV breaker SC202	Dominion (100%)
b0921	Reconductor Brambleton - Cochran Mill 230 kV line with 201 Yukon conductor	Dominion (100%)
b0923	Install 50-100 MVAR variable reactor banks at Carson 230 kV	Dominion (100%)
b0924	Install 50-100 MVAR variable reactor banks at Dooms 230 kV	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0925	Install 50-100 MVAR variable reactor banks at Garrisonville 230 kV		Dominion (100%)
b0926	Install 50-100 MVAR variable reactor banks at Hamilton 230 kV		Dominion (100%)
b0927	Install 50-100 MVAR variable reactor banks at Yadkin 230 kV		Dominion (100%)
b0928	Install 50-100 MVAR variable reactor banks at Carolina, Doods, Everetts, Idylwood, N. Alexandria, N. Anna, Suffolk and Valley 230 kV substations		Dominion (100%)
b1056	Build a 2nd Shawboro – Elizabeth City 230kV line		Dominion (100%)
b1058	Add a third 230/115 kV transformer at Suffolk substation		Dominion (100%)
b1058.1	Replace Suffolk 115 kV breaker ‘T122’ with a 40 kA breaker		Dominion (100%)
b1058.2	Convert Suffolk 115 kV straight bus to a ring bus for the three 230/115 kV transformers and three 115 kV lines		Dominion (100%)
b1071	Rebuild the existing 115 kV corridor between Landstown - Va Beach Substation for a double circuit arrangement (230 kV & 115 kV)		Dominion (100%)
b1076	Replace existing North Anna 500-230kV transformer with larger unit		Dominion (100%)
b1087	Replace Cannon Branch 230-115 kV with larger transformer		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1088	Build new Radnor Heights Sub, add new underground circuit from Ballston - Radnor Heights, Tap the Glebe - Davis line and create circuits from Davis - Radnor Heights and Glebe - Radnor Heights		Dominion (100%)
b1089	Install 2nd Burke to Sideburn 230 kV underground cable		Dominion (100%)
b1090	Install a 150 MVAR 230 kV capacitor and one 230 kV breaker at Northwest		Dominion (100%)
b1095	Reconductor Chase City 115 kV bus and add a new tie breaker		Dominion (100%)
b1096	Construct 10 mile double ckt. 230kV tower line from Loudoun to Middleburg		Dominion (100%)
b1102	Replace Bremono 115 kV breaker '9122'		Dominion (100%)
b1103	Replace Bremono 115 kV breaker '822'		Dominion (100%)
b1172	Build a 4-6 mile long 230 kV line from Hopewell to Bull Hill (Ft Lee) and install a 230-115 kV Tx		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1188	Build new Brambleton 500 kV three breaker ring bus connected to the Loudoun to Pleasant View 500 kV line	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1188.1	Replace Loudoun 230 kV breaker '200852' with a 63 kA breaker	Dominion (100%)
b1188.2	Replace Loudoun 230 kV breaker '2008T2094' with a 63 kA breaker	Dominion (100%)
b1188.3	Replace Loudoun 230 kV breaker '204552' with a 63 kA breaker	Dominion (100%)
b1188.4	Replace Loudoun 230 kV breaker '209452' with a 63 kA breaker	Dominion (100%)
b1188.5	Replace Loudoun 230 kV breaker 'WT2045' with a 63 kA breaker	Dominion (100%)
b1188.6	Install one 500/230 kV transformer and two 230 kV breakers at Brambleton	AEC (0.22%) / BGE (7.90%) / DPL (0.59%) / Dominion (75.58%) / ME (0.22%) / PECO (0.73%) / PEPCO (14.76%)
b1224	Install 2nd Clover 500/230 kV transformer and a 150 MVar capacitor	BGE (7.56%) / DPL (1.03%) / Dominion (78.21%) / ME (0.77%) / PECO (1.39%) / PEPCO (11.04%)
b1225	Replace Yorktown 115 kV breaker 'L982-1'	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1226	Replace Yorktown 115 kV breaker 'L982-2'		Dominion (100%)
b1279	Line #69 Uprate – Increase rating on Locks – Purdy 115 kV to serve additional load at the Reams delivery point		Dominion (100%)
b1306	Reconfigure 115 kV bus at Endless Caverns substation such that the existing two 230/115 kV transformers at Endless Caverns operate in		Dominion (100%)
b1307	Install a 2nd 230/115 kV transformer at Northern Neck Substation		Dominion (100%)
b1308	Improve LSE's power factor factor in zone to .973 PF, adjust LTC's at Gordonsville and Remington, move existing shunt capacitor banks		Dominion (100%)
b1309	Install a 230 kV line from Lakeside to Northwest utilizing the idle line and 60 line ROW's and reconductor the existing 221 line between Elmont and Northwest		Dominion (100%)
b1310	Install a 115 kV breaker at Broadnax substation on the South Hill side of Broadnax		Dominion (100%)
b1311	Install a 230 kV 3000 amp breaker at Cranes Corner substation to sectionalize the 2104 line into two lines		Dominion (100%)
b1312	Loop the 2054 line in and out of Hollymeade and place a 230 kV breaker at Hollymeade. This creates two lines: Charlottesville - Hollymeade		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1313 Resag wire to 125C from Chesterfield – Shockoe and replace line switch 1799 with 1200 amp switch. The new rating would be 231 MVA.		Dominion (100%)
b1314 Rebuild the 6.8 mile line #100 from Chesterfield to Harrowgate 115 kV for a minimum 300 MBA rating		Dominion (100%)
b1315 Convert line #64 Trowbridge to Winfall to 230 kV and install a 230 kV capacitor bank at Winfall		Dominion (100%)
b1316 Rebuild 10.7 miles of 115 kV line #80, Battleboro – Heartsease DP		Dominion (100%)
b1317 LSE load power factor on the #47 line will need to meet MOA requirements of .973 in 2015 to further resolve this issue through at least 2019		Dominion (100%)
b1318 Install a 115 kV bus tie breaker at Acca substation between the Line #60 and Line #95 breakers		Dominion (100%)
b1319 Resag line #222 to 150 C and upgrade any associated equipment to a 2000A rating to achieve a 706 MVA summer line rating		Dominion (100%)
b1320 Install a 230 kV, 150 MVAR capacitor bank at Southwest substation		Dominion (100%)
b1321 Build a new 230 kV line North Anna – Oak Green and install a 224 MVA 230/115 kV transformer at Oak Green		BGE (0.85%) / Dominion (97.96%) / PEPCO (1.19%)
b1322 Rebuild the 39 Line (Dooms – Sherwood) and the 91 Line (Sherwood – Bremono)		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1323 Install a 224 MVA 230/115 kV transformer at Staunton. Rebuild the 115 kV line #43 section Staunton - Verona		Dominion (100%)
b1324 Install a 115 kV capacitor bank at Oak Ridge. Install a capacitor bank at New Bohemia. Upgrade 230/34.5 kV transformer #3 at Kings Fork		Dominion (100%)
b1325 Rebuild 15 miles of line #2020 Winfall – Elizabeth City with a minimum 900 MVA rating		Dominion (100%)
b1326 Install a third 168 MVA 230/115 kV transformer at Kitty Hawk with a normally open 230 kV breaker and a low side 115 kV breaker		Dominion (100%)
b1327 Rebuild the 20 mile section of line #22 between Kerr Dam – Eatons Ferry substations		Dominion (100%)
b1328 Uprate the 3.63 mile line section between Possum and Dumfries substations, replace the 1600 amp wave trap at Possum Point		AEC (0.66%) / APS (3.59%) / DPL (0.91%) / Dominion (92.94%) / PECO (1.90%)
b1329 Install line-tie breakers at Sterling Park substation and BECO substation		Dominion (100%)
b1330 Install a five breaker ring bus at the expanded Dulles substation to accommodate the existing Dulles Arrangement and support the Metrorail		Dominion (100%)
b1331 Build a 230 kV line from Shawboro to Aydlett tap and connect Aydlett to the new line		Dominion (100%)
b1332 Build Cannon Branch to Nokesville 230 kV line		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1333 Advance n1728 (Replace Possum Point 230 kV breaker H9T237 with an 80 kA breaker)		Dominion (100%)
b1334 Advance n1748 (Replace Ox 230 kV breaker 22042 with a 63 kA breaker)		Dominion (100%)
b1335 Advance n1749 (Replace Ox 230 kV breaker 220T2603 with a 63 kA breaker)		Dominion (100%)
b1336 Advance n1750 (Replace Ox 230 kV breaker 24842 with a 63 kA breaker)		Dominion (100%)
b1337 Advance n1751 (Replace Ox 230 kV breaker 248T2013 with a 63 kA breaker)		Dominion (100%)
b1503.1 Loop Line #2095 in and out of Waxpool approximately 1.5 miles		Dominion (100%)
b1503.2 Construct a new 230kV line from Brambleton to BECO Substation of approximately 11 miles with approximately 10 miles utilizing the vacant side of existing Line #2095 structures		Dominion (100%)
b1503.3 Install a one 230 kV breaker, Future 230 kV ring-bus at Waxpool Substation		Dominion (100%)
b1503.4 The new Brambleton - BECO line will feed Shellhorn Substation load and Greenway TX's #2&3 load		Dominion (100%)
b1506.1 At Gainesville Substation, create two 115 kV straight-buses with a normally open tie-breaker		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1506.2	Upgrade Line 124 (radial from Loudoun) to a minimum continuous rating of 500 MVA and network it into the 115 kV bus feeding NOVEC's DP at Gainesville	Dominion (100%)
b1506.3	Install two additional 230 kV breakers in the ring at Gainesville (may require substation expansion) to accommodate conversion of NOVEC's Gainesville to Wheeler line	Dominion (100%)
b1506.4	Convert NOVEC's Gainesville-Wheeler line from 115 kV to 230 kV (will require Gainesville DP Upgrade replacement of three transformers total at Atlantic and Wheeler Substations)	Dominion (100%)
b1507	Rebuild Mt Storm – Doubs 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (19.55%) / BGE (15.30%) / Dominion (48.38%) / PEPCO (16.77%)</u>
b1508.1	Build a 2nd 230 kV Line Harrisonburg to Endless Caverns	APS (37.05%) / Dominion (62.95%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1508.2	Install a 3rd 230-115 kV Tx at Endless Caverns		APS (37.05%) / Dominion (62.95%)
b1508.3	Upgrade a 115 kV shunt capacitor banks at Merck and Edinburg		APS (37.05%) / Dominion (62.95%)
b1536	Advance n1752 (Replace OX 230 breaker 24342 with an (63kA breaker)		Dominion (100%)
b1537	Advance n1753 (Replace OX 230 breaker 243T2097 with an 63kA breaker)		Dominion (100%)
b1538	Replace Loudoun 230 kV breaker '29552'		Dominion (100%)
b1571	Replace Acca 115 kV breaker '6072' with 40 kA		Dominion (100%)
b1647	Upgrade the name plate rating at Morrisville 500kV breaker 'H1T573' with 50kA breaker		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> Dominion (100%)
b1648	Upgrade name plate rating at Morrisville 500kV breaker 'H2T545' with 50kA breaker		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1649	Replace Morrisville 500kV breaker 'H1T580' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1650	Replace Morrisville 500kV breaker 'H2T569' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1651	Replace Loudoun 230kV breaker '295T2030' with 63kA breaker	Dominion (100%)
b1652	Replace Ox 230kV breaker '209742' with 63kA breaker	Dominion (100%)
b1653	Replace Clifton 230kV breaker '26582' with 63kA breaker	Dominion (100%)
b1654	Replace Clifton 230kV breaker '26682' with 63kA breaker	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1655	Replace Clifton 230kV breaker '205182' with 63kA breaker	Dominion (100%)
b1656	Replace Clifton 230kV breaker '265T266' with 63kA breaker	Dominion (100%)
b1657	Replace Clifton 230kV breaker '2051T2063' with 63kA breaker	Dominion (100%)
b1694	Rebuild Loudoun - Brambleton 500 kV Rebuild Loudoun - Brambleton 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (12.14%) / BGE (16.21%) / Dominion (54.33%) / PEPCO (17.32%)</u>
b1696	Install a breaker and a half scheme with a minimum of eight 230 kV breakers for five existing lines at Idylwood 230 kV	AEC (0.46%) / APS (4.18%) / BGE (2.02%) / DPL (0.80%) / Dominion (88.45%) / JCPL (0.64%) / ME (0.50%) / NEPTUNE* (0.06%) / PECO (1.55%) / PEPCO (1.34%)
b1697	Build a 2nd Clark - Idylwood 230 kV line and install 230 kV gas-hybrid breakers at Clark	AEC (1.35%) / APS (15.65%) / BGE (10.53%) / DPL (2.59%) / Dominion (46.97%) / JCPL (2.36%) / ME (1.91%) / NEPTUNE* (0.23%) / PECO (4.48%) / PEPCO (11.23%) / PSEG (2.59%) / RE (0.11%)
b1698	Install a 2nd 500/230 kV transformer at Brambleton	APS (4.21%) / BGE (13.28%) / DPL (1.09%) / Dominion (59.38%) / PEPCO (22.04%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1698.1	Install a 500 kV breaker at Brambleton	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) /  DPL (2.53%) / Dominion  (13.30%) / EKPC (2.14%) /  HTP*** (0.20%) / JCPL (3.57%) /  ME (1.72%) / NEPTUNE*  (0.41%) / PECO (4.97%) /  PENELEC (1.86%) / PEPCO  (3.85%) / PPL (4.95%) / PSEG  (5.89%) / RE (0.24%) / ECP**  (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1698.6	Replace Brambleton 230 kV breaker '2094T2095'	Dominion (100%)
b1699	Reconfigure Line #203 to feed Edwards Ferry sub radial from Pleasant View 230 kV and install new breaker bay at Pleasant View Sub	Dominion (100%)
b1700	Install a 230/115 kV transformer at the new Liberty substation to relieve Gainesville Transformer #3	Dominion (100%)
b1701	Reconductor line #2104 (Fredericksburg - Cranes Corner 230 kV)	APS (8.66%) / BGE (10.95%) / Dominion (63.30%) / PEPCO (17.09%)
b1724	Install a 2nd 138/115 kV transformer at Edinburg	Dominion (100%)
b1728	Replace the 115/34.5 kV transformer #1 at Hickory with a 230/34.5 kV transformer	Dominion (100%)

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**Virginia Electric and Power Company (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b1729	Add 4 breaker ring bus at Burton 115 kV substation and construct a 115 kV line approximately 3.5 miles from Oakwood 115 kV substation to Burton 115 kV substation		Dominion (100%)
b1730	Install a 230/115 kV transformer at a new Liberty substation		Dominion (100%)
b1731	Uprate or rebuild Four Rivers – Kings Dominion 115 kV line or Install capacitors or convert load from 115 kV system to 230 kV system		Dominion (100%)
b1790	Split Wharton 115 kV capacitor bank into two smaller units and add additional reactive support in area by correcting power factor at Pantego 115 kV DP and FivePoints 115 kV DP to minimum of 0.973		Dominion (100%)
b1791	Wreck and rebuild 2.1 mile section of Line #11 section between Gordonsville and Somerset		APS (5.83%) / BGE (6.25%) / Dominion (78.38%) / PEPCO (9.54%)
b1792	Rebuild line #33 Halifax to Chase City, 26 miles. Install 230 kV 4 breaker ring bus		Dominion (100%)
b1793	Wreck and rebuild remaining section of Line #22, 19.5 miles and replace two pole H frame construction built in 1930		Dominion (100%)
b1794	Split 230 kV Line #2056 (Hornertown - Rocky Mount) and double tap line to Battleboro Substation. Expand station, install a 230 kV 3 breaker ring bus and install a 230/115 kV transformer		Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1795	Reconductor segment of Line #54 (Carolina to Woodland 115 kV) to a minimum of 300 MVA	Dominion (100%)
b1796	Install 115 kV 25 MVAR capacitor bank at Kitty Hawk Substation	Dominion (100%)
b1797	Wreck and rebuild 7 miles of the Dominion owned section of Cloverdale - Lexington 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEP (0.10%) / APS (30.84%) / ATSI (0.04%) / BGE (27.57%) / Dayton (0.01%) / DEOK (0.04%) / Dominion (0.11%) / EKPC (0.01%) / PEPCO (41.28%)</u></p>
b1798	Build a 450 MVAR SVC and 300 MVAR switched shunt at Loudoun 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>BGE (7.93%) / Dominion (76.09%) / PEPCO (15.98%)</u></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1799	Build 150 MVAR Switched Shunt at Pleasant View 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) /  DPL (2.53%) / Dominion  (13.30%) / EKPC (2.14%) /  HTP*** (0.20%) / JCPL (3.57%) /  ME (1.72%) / NEPTUNE*  (0.41%) / PECO (4.97%) /  PENELEC (1.86%) / PEPCO  (3.85%) / PPL (4.95%) / PSEG  (5.89%) / RE (0.24%) / ECP**  (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (2.14%) / DPL (0.36%) /</u>  <u>Dominion (96.45%) / ME (0.34%)</u>  <u>/ PEPCO (0.71%)</u></p>
b1805	Install a 250 MVAR SVC at the existing Mt. Storm 500kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) /  DPL (2.53%) / Dominion  (13.30%) / EKPC (2.14%) /  HTP*** (0.20%) / JCPL (3.57%) /  ME (1.72%) / NEPTUNE*  (0.41%) / PECO (4.97%) /  PENELEC (1.86%) / PEPCO  (3.85%) / PPL (4.95%) / PSEG  (5.89%) / RE (0.24%) / ECP**  (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.47%) / BGE (19.13%) /</u>  <u>PEPCO (44.40%)</u></p>
b1809	Replace Brambleton 230 kV Breaker '22702'	Dominion (100%)
b1810	Replace Brambleton 230 kV Breaker '227T2094'	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b1905.1	Surry to Skiffes Creek 500 kV Line (7 miles overhead)		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <b><u>Dominion (100%)</u></b>
b1905.2	Surry 500 kV Station Work		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <b><u>Dominion (100%)</u></b>
b1905.3	Skiffes Creek 500-230 kV Tx and Switching Station		Dominion (99.84%) / PEPCO (0.16%)
b1905.4	New Skiffes Creek - Whealton 230 kV line		Dominion (99.84%) / PEPCO (0.16%)
b1905.5	Whealton 230 kV breakers		Dominion (99.84%) / PEPCO (0.16%)
b1905.6	Yorktown 230 kV work		Dominion (99.84%) / PEPCO (0.16%)
b1905.7	Lanexa 115 kV work		Dominion (99.84%) / PEPCO (0.16%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.8	Surry 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.9	Kings Mill, Peninmen, Toano, Waller, Warwick	Dominion (99.84%) / PEPCO (0.16%)
b1906.1	At Yadkin 500 kV, install six 500 kV breakers	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <b><u>Dominion (100%)</u></b>
b1906.2	Install a 2nd 230/115 kV TX at Yadkin	Dominion (100%)
b1906.3	Install a 2nd 230/115 kV TX at Chesapeake	Dominion (100%)
b1906.4	Uprate Yadkin – Chesapeake 115 kV	Dominion (100%)
b1906.5	Install a third 500/230 kV TX at Yadkin	Dominion (100%)
b1907	Install a 3rd 500/230 kV TX at Clover	APS (5.83%) / BGE (4.74%) / Dominion (81.79%) / PEPCO (7.64%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1908	Rebuild Lexington – Dooms 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> DEOK (0.06%) / Dominion (80.28%) / PEPCO (19.66%)
b1909	Uprate Brems – Midlothian 230 kV to its maximum operating temperature	APS (6.31%) / BGE (3.81%) / Dominion (81.90%) / PEPCO (7.98%)
b1910	Build a Suffolk – Yadkin 230 kV line (14 miles) and install 4 breakers	Dominion (100%)
b1911	Add a second Valley 500/230 kV TX	APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)
b1912	Install a 500 MVAR SVC at Landstown 230 kV	DEOK (0.46%) / Dominion (99.54%)
b2053	Rebuild 28 mile line	AEP (100%)
b2125	Install four additional 230 kV 100 MVAR variable shunt reactor banks at Clifton, Gallows Road, Garrisonville, and Virginia Hills substations	Dominion (100%)
b2126	Install two additional 230 kV 100 MVAR variable shunt reactor banks at Churchland and Shawboro substations	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2181	Add a motor to an existing switch at Prince George to allow for Sectionalizing scheme for line #2124 and allow for Brickhouse DP to be re-energized from the 115 kV source		Dominion (100%)
b2182	Install 230kV 4-breaker ring at Enterprise 230 kV to isolate load from transmission system when substation initially built		Dominion (100%)
b2183	Add a motor to an existing switch at Keene Mill to allow for a sectionalizing scheme		Dominion (100%)
b2184	Install a 230 kV breaker at Tarboro to split line #229. Each will feed an autotransformer at Tarboro. Install switches on each autotransformer		Dominion (100%)
b2185	Uprate Line #69 segment Reams DP to Purdy (19 miles) from 41 MVA to 162 MVA by replacing 5 structures and re-sagging the line from 50C to 75C		Dominion (100%)
b2186	Install a 2nd 230-115kV transformer at Earleys connected to the existing 115kV and 230kV ring busses. Add a 115 kV breaker and 230kV breaker to the ring busses		Dominion (100%)
b2187	Install 4 - 230kV breakers at Shellhorn 230 kV to isolate load		Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## **SCHEDULE 12-C**

### **Assignment of Cost Responsibility for Covered Transmission Enhancements**

**1. Applicability:** This Schedule 12-C shall apply to the assignment of cost responsibility with respect to the Required Transmission Enhancements listed on Schedule 12-C Appendix A, as of January 1, 2016. Each such Required Transmission Enhancement, including any Necessary Lower Voltage Facilities associated therewith, is hereafter referred to as a “Covered Transmission Enhancement.”

**2. Effective Date of Rates and Charges under this Schedule 12-C:** This Schedule 12-C shall apply to the assignment of cost responsibility with respect to the Covered Transmission Enhancements from and after January 1, 2016. The assignment of cost responsibility for Covered Transmission Enhancements through December 31, 2015 shall continue to be governed by Schedule 12 - Appendix.

**3. Implementation Calculations:** PJM shall track and accumulate the differences between amounts collected from Responsible Customers with respect to the Covered Transmission Enhancements and the rates and charges applicable under this Schedule 12-C between January 1, 2016 and the date of a FERC order in Docket No. EL05-121-009 authorizing PJM to begin collecting the rates specified in this Schedule 12-C (the “Implementation Date”). To reflect those differences and implement the rates and charges applicable under this Schedule 12-C as of January 1, 2016, PJM shall issue to Responsible Customers monthly credits or charges equal to (a) the aggregate of such differences between January 1, 2016 and the Implementation Date, including interest calculated from January 1, 2016 in accordance with 18 C.F.R. § 35.19a, divided by (b) the fewer of (i) 12 or (ii) the number of months between January 1, 2016 and the Implementation Date, rounded to the nearest whole number. Each monthly credit or charge shall also include interest from the Implementation Date calculated in accordance with 18 C.F.R. § 35.19a to the date such credit or charge is issued.

### **4. Cost Responsibility for Covered Transmission Enhancements After January 1, 2016:**

- a. Transmission Provider shall collect, with respect to each Covered Transmission Enhancement from Responsible Customers, as defined in Schedule 12, as two separate line items on their bills: (i) Current Recovery Charges, calculated as set forth in subsection 4.b of this Schedule 12-C; and (ii) Transmission Enhancement Charge Adjustments, calculated as set forth in subsection 4.c of this Schedule 12-C.
- b. The Current Recovery Charges for each Covered Transmission Enhancement shall assign responsibility to pay the Transmission Enhancement Charges established pursuant to Schedule 12 with respect to that Covered Transmission Enhancement to Responsible Customers as follows:

i. Fifty percent (50%) shall be assigned annually to Zones and Merchant Transmission Facilities on a load-ratio share basis, as set forth in section (b)(i)(A)(1) of Schedule 12; and

ii. Fifty percent (50%) shall be assigned annually to Zones and Merchant Transmission Facilities as follows:

(1) In the case of any Covered Transmission Enhancement that is not identified on Schedule 12-C Appendix A as a project that was canceled or abandoned before entering service (hereafter referred to as a “Canceled Project”), in accordance with subsection (b)(i)(A)(2)(a) of Schedule 12; or

(2) In the case of any Covered Transmission Enhancement that is identified on Schedule 12-C Appendix A as a Canceled Project, in accordance with the cost responsibility assignments set forth in Schedule 12-C Appendix B.

The Current Recovery Charges shall be adjusted, as necessary, if the Commission modifies the charges that the owner(s) of a Covered Transmission Enhancement are authorized to recover, including but not limited to, the charges for a Canceled Project, so that the Current Recovery Charges with respect to each Covered Transmission Enhancement reflect only the amounts the Commission authorizes the owner(s) to recover from and after January 1, 2016, including any return on investment or carrying charges the Commission authorizes.

c. During each month during the period beginning on the January 1, 2016 and continuing through December 31, 2025, the Transmission Enhancement Charge Adjustment determined under this subsection 4.c. shall be applied to Responsible Customers in addition to the Current Recovery Charge. The Transmission Enhancement Charge Adjustment shall be the charge or credit specified in Schedule 12-C, Appendix C with respect to the month for the Zone or Merchant Transmission Facility applicable to the Responsible Customer, subject to adjustment in accordance with subsection 4.c.(i).

i. The Transmission Enhancement Charge Adjustments shall be subject to adjustment only in the circumstances described in paragraph (1) or (2) of this subsection 4.c.(i).

(1) If the Commission determines in a final order in Docket No. ER12-2708-003 that is no longer subject to judicial review that all or a portion of the costs incurred by the owners of the Potomac Appalachian Transmission Highline (“PATH”) Project through charges under Schedule 12 are or were not properly recoverable, then the Transmission Enhancement Charge Adjustment set forth in Schedule 12-C, Appendix C shall be adjusted as follows. PJM shall calculate the necessary adjustments to the Transmission Enhancement Charge Adjustments over the remainder of the period during which Transmission Enhancement Charge Adjustments are

collected so that the amounts recovered by Transmission Enhancement Charge Adjustments with respect to the PATH Project, as shown on Schedule 12-C ,Appendix C, reflect only the amounts the Commission authorizes the owner(s) to recover prior to January 1, 2016, including any return on investment or carrying charges authorized in such Commission final order. If a Commission determination in such a final order is subsequently modified on rehearing, judicial review, or remand, the Transmission Enhancement Charge Adjustments shall be adjusted to give effect to such ruling.

(2) If all Responsible Customers in a Zone or Merchant Transmission Facility are no longer subject to Transmission Enhancement Charges under the PJM Tariff during the period in which Transmission Enhancement Charge Adjustments are collected, then, during the portion of that period that such Responsible Customers are not subject to Transmission Enhancement Charges, the payments from or credits to such Responsible Customers shall cease and PJM shall adjust the Transmission Enhancement Charge Adjustments payable by and credited to other remaining Responsible Customers on a pro rata basis, as follows. If such Responsible Customers were entitled to a credit, then the credit associated with such Responsible Customers shall be allocated pro rata among all Zones and Merchant Transmission Facilities in which Responsible Customers remain subject to Transmission Enhancement Charges and are entitled to credits. If such Responsible Customers were required to make payments, then the payment obligation associated with such Responsible Customers shall be allocated pro rata among all remaining Zones and Merchant Transmission Facilities in which Responsible Customers remain subject to Transmission Enhancement Charges and have payment obligations. If Responsible Customers in a Zone or Merchant Transmission Facility comprising substantially the same transmission assets as a Zone or Merchant Transmission Facility identified on Schedule 12-C Appendix C, again become subject to Transmission Enhancement Charges during the period that Transmission Enhancement Charge Adjustments are collected, the payments from or credits to such customers shall resume and the adjustments to payments from or credits to other Responsible Customers in accordance with this subsection shall cease.

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(3) If Consolidated Edison Company of New York, Inc. ("Con Edison") terminates its transmission service agreements with PJM (PJM Original Service Agreements 1873 and 1874) during the period in which Transmission Enhancement Charge Adjustments are collected, then, provided Con Edison remains a party to the PJM Operating Agreement, payments from or credits to Con Edison as Transmission Enhancement Charge Adjustments, as determined in accordance with this Schedule 12-C, shall continue for the remainder of that period.

**5. Recovery of Current Recovery Charges and Transmission Enhancement Charge Adjustments:**

- a. Responsible Customers shall pay Transmission Provider all applicable Current Recovery Charges and Transmission Enhancement Charge Adjustments as required by this Schedule 12-C in addition to all other charges for transmission service for which such Responsible Customers are responsible under the Tariff.
- b. Transmission Provider shall collect all applicable Current Recovery Charges and Transmission Enhancement Charge Adjustments from each Responsible Customer on a monthly basis. Transmission Provider shall remit or credit all revenues received from Responsible Customers under this Schedule 12-C to the Transmission Owner(s) that established Transmission Enhancement Charges with respect to Covered Transmission Enhancements.

**6. Crediting of Revenues from Current Recovery Charges:** Current Recovery Charges for a billing month with respect to a Transmission Owner's Covered Transmission Enhancement(s) shall be subject to revenue crediting in accordance with Section (e) of Schedule 12.

## SCHEDULE 12-C APPENDIX A

### List of Covered Transmission Enhancements

<u>Project Name or Description</u>	<u>Project ID(s)</u>
<u>TrAILCo</u>	<u>b0328.2, b0347.1, b0347.10, b0347.11, b0347.12, b0347.13, b0347.14, b0347.15, b0347.16, b0347.17, b0347.18, b0347.19, b0347.2, b0347.20, b0347.21, b0347.22, b0347.23, b0347.24, b0347.25, b0347.26, b0347.27, b0347.28, b0347.29, b0347.3, b0347.30, b0347.31, b0347.32, b0347.4, b0347.5, b0347.6, b0347.7, b0347.8, b0347.9, b1804</u>
<u>Black Oak SVC</u>	<u>b0216</u>
<u>PATH (Canceled Project)</u>	<u>b0490, b0490.2, b0490.3, b0490.4, b0490.5, b0490.6, b0490.7, b0490.8, b0490.9, b0491, b0492, b0492.10, b0492.11, b0492.12, b0492.6, b0492.7, b0492.8, b0492.9, b0560</u>
<u>Carson-Suffolk</u>	<u>b0231, b0329</u>
<u>Mt. Storm-Doubs</u>	<u>b0217, b1507</u>
<u>Meadowbrook-Loudon</u>	<u>b0328.1, b0328.3, b0328.4</u>
<u>Susquehanna-Roseland</u>	<u>b0487, b0489, b0489.10, b0489.11, b0489.12, b0489.13, b0489.14, b0489.15, b0489.5, b0489.6, b0489.7, b0489.8, b0489.9</u>
<u>MAPP (Canceled Project)</u>	<u>b0512, b0512.10, b0512.11, b0512.12, b0512.13, b0512.14, b0512.15, b0512.16, b0512.17, b0512.18, b0512.19, b0512.20, b0512.21, b0512.22, b0512.23, b0512.24, b0512.25, b0512.26, b0512.27, b0512.28, b0512.29, b0512.5, b0512.6, b0512.7, b0512.8, b0512.9</u>
<u>Branchburg Wave Trap</u>	<u>b0172.2</u>
<u>Branchburg Capacitor</u>	<u>b0290</u>
<u>Kammer Transformer</u>	<u>b0495</u>
<u>Loop Into New Freedom</u>	<u>b0498</u>
<u>Meadow Brook Capacitor</u>	<u>b0559</u>
<u>BRH Project (Canceled Project)</u>	<u>b0829, b0830, b0832, b0833</u>
<u>Rockport Reactor</u>	<u>b1465.2</u>
<u>Dumont-Marysville</u>	<u>b1659.14</u>
<u>Cloverdale-Lexington</u>	<u>b1797</u>
<u>Loudon SVC</u>	<u>b1798</u>
<u>Pleasant View Capacitor</u>	<u>b1799</u>
<u>Hunterstown SVC</u>	<u>b1800</u>
<u>Doubs Capacitor</u>	<u>b1803</u>
<u>Mt Storm SVC</u>	<u>b1805</u>
<u>Lexington-Dooms</u>	<u>b1908</u>
<u>Conemaugh Capacitor</u>	<u>b0376</u>

<u>Dominion EHV Projects</u>	<u>b0222, b0457, b0756.1, b0784, b0837, b1188, b1647, b1648, b1649, b1650, b1698.1, b1905.2, b1906.1, b1694, b0412, b1905.1</u>
<u>PSEG EHV Projects</u>	<u>b1410, b1411, b1412, b1413, b1414, b1415, b0829.6</u>
<u>PPL EHV Projects</u>	<u>b0171.2, b0172.1, b2006.1, b0284.2</u>
<u>AEP East EHV Projects</u>	<u>b0504, b1465.3, b1465.4, b1659.13, b1660, b1661, b1962, b1663.2</u>
<u>AECO EHV Projects</u>	<u>b0210</u>
<u>Delmarva EHV Projects</u>	<u>b0272.1, b0751</u>
<u>PECO EHV Projects</u>	<u>b0171.1, b0269, b0269.6, b0287</u>
<u>Allegheny EHV Projects</u>	<u>b0393, b0419, b0577, b1507.2, b1507.3</u>
<u>Penelec EHV Projects</u>	<u>b0549</u>



**SCHEDULE 12-C APPENDIX B**

**Allocations for Canceled Projects**

	<u>PATH</u>	<u>MAPP</u>
<u>AEC</u>	<u>4.99%</u>	<u>3.94%</u>
<u>AEP</u>	<u>4.37%</u>	<u>0.00%</u>
<u>APS</u>	<u>9.22%</u>	<u>0.33%</u>
<u>ATSI</u>	<u>0.00%</u>	<u>0.00%</u>
<u>BGE</u>	<u>4.41%</u>	<u>34.52%</u>
<u>ComEd</u>	<u>0.00%</u>	<u>0.00%</u>
<u>Coned</u>	<u>0.00%</u>	<u>0.00%</u>
<u>Dayton</u>	<u>0.00%</u>	<u>0.00%</u>
<u>DEOK</u>	<u>0.00%</u>	<u>0.00%</u>
<u>DL</u>	<u>0.02%</u>	<u>0.00%</u>
<u>DPL</u>	<u>6.88%</u>	<u>14.68%</u>
<u>Dominion</u>	<u>10.77%</u>	<u>0.30%</u>
<u>EKPC</u>	<u>0.00%</u>	<u>0.00%</u>
<u>HTP</u>	<u>0.00%</u>	<u>0.00%</u>
<u>JCPL</u>	<u>11.59%</u>	<u>9.43%</u>
<u>ME</u>	<u>2.93%</u>	<u>2.16%</u>
<u>Neptune</u>	<u>1.11%</u>	<u>0.90%</u>
<u>PECO</u>	<u>14.45%</u>	<u>10.51%</u>
<u>PENELEC</u>	<u>0.00%</u>	<u>0.00%</u>
<u>PEPCO</u>	<u>6.08%</u>	<u>2.44%</u>
<u>PPL</u>	<u>6.36%</u>	<u>5.50%</u>
<u>PSEG</u>	<u>15.79%</u>	<u>14.37%</u>
<u>RE</u>	<u>0.59%</u>	<u>0.54%</u>
<u>UGI</u>	<u>0.00%</u>	<u>0.00%</u>
<u>ECP</u>	<u>0.44%</u>	<u>0.38%</u>
<u>TOTAL</u>	<u>100.00%</u>	<u>100.00%</u>

Note: The above percentages apply to 50% of the responsibility to pay the Transmission Enhancement Charges for the identified Canceled Projects in accordance with section 3.b.ii.(2) of Schedule 12-C.

**SCHEDULE 12-C APPENDIX C**

**TRANSMISSION ENHANCEMENT CHARGE ADJUSTMENTS**

**(Effective January 1, 2016)**

<b><u>Zone or MTF</u></b>	<b><u>TEC Adjustment Years 1-4 Without PATH</u></b>	<b><u>TEC Adjustment Years 1-4 PATH Only</u></b>	<b><u>Total TEC Adjustment Years 1 through 4</u></b>	<b><u>TEC Adjustment Years 5-10 Without PATH</u></b>	<b><u>TEC Adjustment Years 5-10 PATH Only</u></b>	<b><u>Total TEC Adjustment Years 5 through 10</u></b>
<b><u>AE</u></b>	<b><u>-\$24,860.09</u></b>	<b><u>\$47,899.66</u></b>	<b><u>\$23,039.57</u></b>	<b><u>-\$10,418.79</u></b>	<b><u>\$20,074.61</u></b>	<b><u>\$9,655.82</u></b>
<b><u>AEP</u></b>	<b><u>-\$2,444,812.18</u></b>	<b><u>-\$174,489.11</u></b>	<b><u>-\$2,619,301.30</u></b>	<b><u>-\$1,024,614.00</u></b>	<b><u>-\$73,127.90</u></b>	<b><u>-\$1,097,741.90</u></b>
<b><u>APS</u></b>	<b><u>\$954,922.88</u></b>	<b><u>\$52,440.01</u></b>	<b><u>\$1,007,362.89</u></b>	<b><u>\$400,205.53</u></b>	<b><u>\$21,977.46</u></b>	<b><u>\$422,182.99</u></b>
<b><u>ATSI</u></b>	<b><u>-\$1,093,902.38</u></b>	<b><u>-\$72,438.56</u></b>	<b><u>-\$1,166,340.94</u></b>	<b><u>-\$458,451.45</u></b>	<b><u>-\$30,358.80</u></b>	<b><u>-\$488,810.25</u></b>
<b><u>BGE</u></b>	<b><u>\$1,281,971.91</u></b>	<b><u>-\$2,640.98</u></b>	<b><u>\$1,279,330.93</u></b>	<b><u>\$537,270.87</u></b>	<b><u>-\$1,106.83</u></b>	<b><u>\$536,164.04</u></b>
<b><u>ComEd</u></b>	<b><u>-\$2,608,103.66</u></b>	<b><u>-\$221,693.57</u></b>	<b><u>-\$2,829,797.23</u></b>	<b><u>-\$1,093,049.01</u></b>	<b><u>-\$92,911.16</u></b>	<b><u>-\$1,185,960.17</u></b>
<b><u>ConEd</u></b>	<b><u>-\$70,904.37</u></b>	<b><u>-\$4,688.81</u></b>	<b><u>-\$75,593.18</u></b>	<b><u>-\$29,715.83</u></b>	<b><u>-\$1,965.07</u></b>	<b><u>-\$31,680.89</u></b>
<b><u>Dayton</u></b>	<b><u>-\$375,384.08</u></b>	<b><u>-\$34,767.87</u></b>	<b><u>-\$410,151.95</u></b>	<b><u>-\$157,322.42</u></b>	<b><u>-\$14,571.12</u></b>	<b><u>-\$171,893.54</u></b>
<b><u>Duke OH/KY</u></b>	<b><u>-\$302,715.79</u></b>	<b><u>-\$20,247.63</u></b>	<b><u>-\$322,963.42</u></b>	<b><u>-\$126,867.35</u></b>	<b><u>-\$8,485.73</u></b>	<b><u>-\$135,353.07</u></b>
<b><u>Duquesne</u></b>	<b><u>-\$318,588.72</u></b>	<b><u>-\$28,822.02</u></b>	<b><u>-\$347,410.74</u></b>	<b><u>-\$133,519.65</u></b>	<b><u>-\$12,079.23</u></b>	<b><u>-\$145,598.88</u></b>
<b><u>Delmarva DE</u></b>	<b><u>-\$157,754.97</u></b>	<b><u>\$37,622.55</u></b>	<b><u>-\$120,132.43</u></b>	<b><u>-\$66,114.67</u></b>	<b><u>\$15,767.50</u></b>	<b><u>-\$50,347.17</u></b>
<b><u>Delmarva MD</u></b>	<b><u>-\$97,639.85</u></b>	<b><u>\$22,956.13</u></b>	<b><u>-\$74,683.72</u></b>	<b><u>-\$40,920.59</u></b>	<b><u>\$9,620.85</u></b>	<b><u>-\$31,299.74</u></b>
<b><u>Delmarva VA</u></b>	<b><u>-\$13,369.07</u></b>	<b><u>\$3,188.35</u></b>	<b><u>-\$10,180.71</u></b>	<b><u>-\$5,602.94</u></b>	<b><u>\$1,336.23</u></b>	<b><u>-\$4,266.71</u></b>
<b><u>Dominion</u></b>	<b><u>\$2,548,417.01</u></b>	<b><u>-\$29,708.12</u></b>	<b><u>\$2,518,708.88</u></b>	<b><u>\$1,068,034.50</u></b>	<b><u>-\$12,450.59</u></b>	<b><u>\$1,055,583.90</u></b>
<b><u>EKPC</u></b>	<b><u>-\$88,156.35</u></b>	<b><u>-\$3,920.00</u></b>	<b><u>-\$92,076.35</u></b>	<b><u>-\$36,946.08</u></b>	<b><u>-\$1,642.86</u></b>	<b><u>-\$38,588.94</u></b>
<b><u>HTP</u></b>	<b><u>\$67,459.71</u></b>	<b><u>-\$392.30</u></b>	<b><u>\$67,067.41</u></b>	<b><u>\$28,272.18</u></b>	<b><u>-\$164.41</u></b>	<b><u>\$28,107.76</u></b>
<b><u>JCPL</u></b>	<b><u>\$684,836.11</u></b>	<b><u>\$113,570.16</u></b>	<b><u>\$798,406.27</u></b>	<b><u>\$287,012.91</u></b>	<b><u>\$47,596.94</u></b>	<b><u>\$334,609.85</u></b>
<b><u>MedEd</u></b>	<b><u>-\$290,626.73</u></b>	<b><u>\$14,498.19</u></b>	<b><u>-\$276,128.54</u></b>	<b><u>-\$121,800.86</u></b>	<b><u>\$6,076.15</u></b>	<b><u>-\$115,724.70</u></b>
<b><u>Neptune</u></b>	<b><u>\$63,553.63</u></b>	<b><u>\$10,067.97</u></b>	<b><u>\$73,621.60</u></b>	<b><u>\$26,635.15</u></b>	<b><u>\$4,219.46</u></b>	<b><u>\$30,854.61</u></b>
<b><u>PECO</u></b>	<b><u>-\$766,990.16</u></b>	<b><u>\$132,927.71</u></b>	<b><u>-\$634,062.44</u></b>	<b><u>-\$321,443.45</u></b>	<b><u>\$55,709.64</u></b>	<b><u>-\$265,733.81</u></b>
<b><u>Penelec</u></b>	<b><u>-\$224,425.28</u></b>	<b><u>-\$30,009.25</u></b>	<b><u>-\$254,434.53</u></b>	<b><u>-\$94,056.01</u></b>	<b><u>-\$12,576.79</u></b>	<b><u>-\$106,632.80</u></b>
<b><u>PEPCO DC</u></b>	<b><u>\$787,856.55</u></b>	<b><u>\$9,072.91</u></b>	<b><u>\$796,929.46</u></b>	<b><u>\$330,188.49</u></b>	<b><u>\$3,802.43</u></b>	<b><u>\$333,990.92</u></b>
<b><u>PEPCO MD</u></b>	<b><u>\$1,145,526.02</u></b>	<b><u>\$13,215.00</u></b>	<b><u>\$1,158,741.03</u></b>	<b><u>\$480,086.78</u></b>	<b><u>\$5,538.37</u></b>	<b><u>\$485,625.15</u></b>
<b><u>PEPCO SMECO</u></b>	<b><u>\$273,479.45</u></b>	<b><u>\$3,154.91</u></b>	<b><u>\$276,634.36</u></b>	<b><u>\$114,614.48</u></b>	<b><u>\$1,322.21</u></b>	<b><u>\$115,936.69</u></b>
<b><u>PPL EU</u></b>	<b><u>-\$786,877.08</u></b>	<b><u>\$20,174.85</u></b>	<b><u>-\$766,702.23</u></b>	<b><u>-\$329,778.00</u></b>	<b><u>\$8,455.23</u></b>	<b><u>-\$321,322.78</u></b>
<b><u>PPL UGI</u></b>	<b><u>-\$40.31</u></b>	<b><u>\$0.00</u></b>	<b><u>-\$40.31</u></b>	<b><u>-\$16.89</u></b>	<b><u>\$0.00</u></b>	<b><u>-\$16.89</u></b>
<b><u>PSEG</u></b>	<b><u>\$1,713,725.35</u></b>	<b><u>\$135,477.48</u></b>	<b><u>\$1,849,202.83</u></b>	<b><u>\$718,217.54</u></b>	<b><u>\$56,778.24</u></b>	<b><u>\$774,995.77</u></b>
<b><u>Rockland</u></b>	<b><u>\$63,940.65</u></b>	<b><u>\$4,698.27</u></b>	<b><u>\$68,638.92</u></b>	<b><u>\$26,797.35</u></b>	<b><u>\$1,969.03</u></b>	<b><u>\$28,766.38</u></b>
<b><u>East Coast Power</u></b>	<b><u>\$79,461.78</u></b>	<b><u>\$2,854.08</u></b>	<b><u>\$82,315.86</u></b>	<b><u>\$33,302.21</u></b>	<b><u>\$1,196.14</u></b>	<b><u>\$34,498.35</u></b>

Schedule 12 – Appendix  
Versions effective January 1, 2017 - 2017 Annual Update  
(Marked Format)

## SCHEDULE 12 – APPENDIX

### (1) Atlantic City Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0135	Build new Cumberland – Dennis 230 kV circuit which replaces existing Cumberland – Corson 138 kV	AEC (100%)
b0136	Install Dennis 230/138 kV transformer, Dennis 150 MVAR SVC and 50 MVAR capacitor	AEC (100%)
b0137	Build new Dennis – Corson 138 kV circuit	AEC (100%)
b0138	Install Cardiff 230/138 kV transformer and a 50 MVAR capacitor at Cardiff	AEC (100%)
b0139	Build new Cardiff – Lewis 138 kV circuit	AEC (100%)
b0140	Reconductor Laurel – Woodstown 69 kV	AEC (100%)
b0141	Reconductor Monroe – North Central 69 kV	AEC (100%)
b0265	Upgrade AE portion of Delco Tap – Mickleton 230 kV circuit	AEC (88.94%) / ConEd (1.04%) / JCPL (9.38%) / Neptune* (0.64%)
b0276	Replace both Monroe 230/69 kV transformers	AEC (91.28%) / PSEG (8.29%) / RE (0.23%) / ECP** (0.20%)
b0276.1	Upgrade a strand bus at Monroe to increase the rating of transformer #2	AEC (100%)
b0277	Install a second Cumberland 230/138 kV transformer	AEC (100%)
b0281.1	Install 35 MVAR capacitor at Lake Ave 69 kV substation	AEC (100%)

## Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0281.2	Install 15 MVAR capacitor at Shipbottom 69 kV substation	AEC (100%)
b0281.3	Install 8 MVAR capacitors on the AE distribution system	AEC (100%)
b0142	Reconductor Landis – Minotola 138 kV	AEC (100%)
b0143	Reconductor Beckett – Paulsboro 69 kV	AEC (100%)
b0210	Install a new 500/230kV substation in AEC area. The high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (100%)</u>
b0210	Install a new 500/230kV substation in AEC area, the high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)††

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

### Atlantic City Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0211	Reconductor Union - Corson 138kV circuit		AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)
b0212	Substation upgrades at Union and Corson 138kV		AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)
b0214	Install 50 MVAR capacitor at Cardiff 230kV substation		AEC (100%)
b0431	Monroe Upgrade New Freedom strand bus		AEC (100%)
b0576	Move the Monroe 230/69 kV to Mickleton		AEC (100%)
b0744	Upgrade a strand bus at Mill 138 kV		AEC (100%)
b0871	Install 35 MVAR capacitor at Motts Farm 69 kV		AEC (100%)
b1072	Modify the existing EMS load shedding scheme at Cedar to additionally sense the loss of both Cedar 230/69 kV transformers and shed load accordingly		AEC (100%)
b1127	Build a new Lincoln-Minitola 138 kV line		AEC (100%)
b1195.1	Upgrade the Corson sub T2 terminal		AEC (100%)
b1195.2	Upgrade the Corson sub T1 terminal		AEC (100%)
b1244	Install 10 MVAR capacitor at Peermont 69 kV substation		AEC (100%)

## Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1245	Rebuild the Newport-South Millville 69 kV line	AEC (100%)
b1250	Reconductor the Monroe – Glassboro 69 kV	AEC (100%)
b1250.1	Upgrade substation equipment at Glassboro	AEC (100%)
b1280	Sherman: Upgrade 138/69 kV transformers	AEC (100%)
b1396	Replace Lewis 138 kV breaker ‘L’	AEC (100%)
b1398.5	Reconductor the existing Mickleton – Goucestr 230 kV circuit (AE portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1598	Reconductor Sherman Av – Carl’s Corner 69kV circuit	AEC (100%)
b1599	Replace terminal equipments at Central North 69 kV substation	AEC (100%)
b1600	Upgrade the Mill T2 138/69 kV transformer	AEC (88.83%) / JCPL (4.74%) / HTP (0.20%) / ECP** (0.22%) / PSEG (5.78%) / RE (0.23%)
b2157	Re-build 5.3 miles of the Corson - Tuckahoe 69 kV circuit	AEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

## SCHEDULE 12 – APPENDIX

### (3) Delmarva Power & Light Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0144.1	Build new Red Lion – Milford – Indian River 230 kV circuit	DPL (100%)
b0144.2	Indian River Sub – 230 kV Terminal Position	DPL (100%)
b0144.3	Red Lion Sub – 230 kV Terminal Position	DPL (100%)
b0144.4	Milford Sub – (2) 230 kV Terminal Positions	DPL (100%)
b0144.5	Indian River – 138 kV Transmission Line to AT-20	DPL (100%)
b0144.6	Indian River – 138 & 69 kV Transmission Ckts. Undergrounding	DPL (100%)
b0144.7	Indian River – (2) 230 kV bus ties	DPL (100%)
b0148	Re-rate Glasgow – Mt. Pleasant 138 kV and North Seaford – South Harrington 138 kV	DPL (100%)
b0149	Complete structure work to increase rating of Cheswold – Jones REA 138 kV	DPL (100%)
b0221	Replace disconnect switch on Edgewood-N. Salisbury 69 kV	DPL (100%)
b0241.1	Keeny Sub – Replace overstressed breakers	DPL (100%)
b0241.2	Edgemoor Sub – Replace overstressed breakers	DPL (100%)
b0241.3	Red Lion Sub – Substation reconfigure to provide for second Red Lion 500/230 kV transformer	DPL (84.5%) / PECO (15.5%)
b0261	Replace 1200 Amp disconnect switch on the Red Lion – Reybold 138 kV circuit	DPL (100%)



## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0262	Reconductor 0.5 miles of Christiana – Edgemoor 138 kV	DPL (100%)
b0263	Replace 1200 Amp wavetrap at Indian River on the Indian River – Frankford 138 kV line	DPL (100%)
b0272.1	Replace line trap and disconnect switch at Keeney 500 kV substation – 5025 Line Terminal Upgrade	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (21.12%) / BGE (1.94%) / DPL (38.69%) / ECP (0.11%) / HTP (0.15%) / JCPL (7.65%) / NEPTUNE (0.99%) / PECO (26.10%) / PEPCO (1.83%) / PPL (1.42%)</u></p>
b0282	Install 46 MVAR capacitors on the DPL distribution system	DPL (100%)
b0291	Replace 1600A disconnect switch at Harmony 230 kV and for the Harmony – Edgemoor 230 kV circuit, increase the operating temperature of the conductor	DPL (100%)
b0295	Raise conductor temperature of North Seaford – Pine Street – Dupont Seaford	DPL (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, LLC

\*\*\*Hudson Transmission Partners, LLC

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0296	Rehoboth/Cedar Neck Tap (6733-2) upgrade		DPL (100%)
b0320	Create a new 230 kV station that splits the 2 <sup>nd</sup> Milford to Indian River 230 kV line, add a 230/69 kV transformer, and run a new 69 kV line down to Harbeson 69 kV		DPL (100%)
b0382	Cambridge Sub – Close through to Todd Substation		DPL (100%)
b0383	Wye Mills AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0384	Replace Indian River AT-20 (400 MVA)		DPL (100%)
b0385	Oak Hall to New Church (13765) Upgrade		DPL (100%)
b0386	Cheswold/Kent (6768) Rebuild		DPL (100%)
b0387	N. Seaford – Add a 2 <sup>nd</sup> 138/69 kV autotransformer		DPL (100%)
b0388	Hallwood/Parksley (6790-2) Upgrade		DPL (100%)
b0389	Indian River AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0390	Rehoboth/Lewes (6751-1 and 6751-2) Upgrade		DPL (100%)
b0391	Kent/New Meredith (6704-2) Upgrade		DPL (100%)
b0392	East New Market Sub – Establish a 69 kV Bus Arrangement		DPL (100%)
b0415	Increase the temperature ratings of the Edgemoor – Christiana – New Castle 138 kV by replacing six transmission poles		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0437	Spare Keeney 500/230 kV transformer		DPL (100%)
b0441	Additional spare Keeney 500/230 kV transformer		DPL (100%)
b0480	Rebuild Lank – Five Points 69 kV		DPL (100%)
b0481	Replace wave trap at Indian River 138 kV on the Omar – Indian River 138 kV circuit		DPL (100%)
b0482	Rebuild Millsboro – Zoar REA 69 kV		DPL (100%)
b0483	Replace Church 138/69 kV transformer and add two breakers		DPL (100%)
b0483.1	Build Oak Hall – Wattsville 138 kV line		DPL (100%)
b0483.2	Add 138/69 kV transformer at Wattsville		DPL (100%)
b0483.3	Establish 138 kV bus position at Oak Hall		DPL (100%)
b0484	Re-tension Worcester – Berlin 69 kV for 125°C		DPL (100%)
b0485	Re-tension Taylor – North Seaford 69 kV for 125°C		DPL (100%)
b0494.1	Install a 2 <sup>nd</sup> Red Lion 230/138 kV		DPL (100%)
b0494.2	Hares Corner – Relay Improvement		DPL (100%)
b0494.3	Reybold – Relay Improvement		DPL (100%)
b0494.4	New Castle – Relay Improvement		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0513	Rebuild the Ocean Bay – Maridel 69 kV line	DPL (100%)
b0527	Replace existing 12 MVAR capacitor at Bethany with a 30 MVAR capacitor	DPL (100%)
b0528	Replace existing 69/12 kV transformer at Bethany with a 138/12 kV transformer	DPL (100%)
b0529	Install an additional 8.4 MVAR capacitor at Grasonville 69 Kv	DPL (100%)
b0530	Replace existing 12 MVAR capacitor at Wye Mills with a 30 MVAR capacitor	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0531	Create a four breaker 138 kV ring bus at Wye Mills and add a second 138/69 kV transformer		DPL (100%)
b0566	Rebuild the Trappe Tap – Todd 69 kV line		DPL (100%)
b0567	Rebuild the Mt. Pleasant – Townsend 138 kV line		DPL (100%)
b0568	Install a third Indian River 230/138 kV transformer		DPL (100%)
b0725	Add a third Steele 230/138 kV transformer		DPL (100%)
b0732	Rebuild Vaugh – Wells 69 kV		DPL (100%)
b0733	Add a second 230/138 kV transformer at Harmony		DPL (97.06%) / PECO (2.94%)
b0734	Rebuild Church – Steele 138 kV		DPL (100%)
b0735	Rebuild Indian River – Omar – Bethany 138 kV		DPL (100%)
b0736	Rebuild Dupont Edgemoor – Edgemoor – Silverside 69 kV		DPL (69.46%) / PECO (17.25%) / ECP** (0.27%) / PSEG (12.53%) / RE (0.49%)
b0737	Build a new Indian River – Bishop 138 kV line		DPL (100%)
b0750	Convert 138 kV network path from Vienna – Loretto – Piney - Grove to 230 kV, add 230/138 kV transformer to Loretto 230 kV		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0751	Add two additional breakers at Keeney 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  DPL (100%)</p>
b0752	Replace two circuit breakers to bring the emergency rating up to 348 MVA	DPL (100%)
b0753	Add a second Loretto 230/138 kV transformer	DPL (100%)
b0754	Rebuild 10 miles of Glasgow to Mt. Pleasant 138 kV line to bring the normal rating to 298 MVA and the emergency rating to 333 MVA	DPL (100%)
b0792	Reconfigure Cecil Sub into 230 and 138 kV ring buses, add a 230/138 kV transformer, and operate the 34.5 kV bus normally open	DPL (100%)
b0873	Build 2nd Glasgow-Mt Pleasant 138 kV line	DPL (100%)
b0874	Reconfigure Brandywine substation	DPL (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, LLC

\*\*\*Hudson Transmission Partners, LLC

## Delmarva Power & Light Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0876	Install 50 MVAR SVC at 138th St 138 kV		DPL (100%)
b0877	Build a 2nd Vienna-Steele 230 kV line		DPL (100%)
b0879.1	Apply a special protection scheme (load drop at Stevensville and Grasonville)		DPL (100%)
b1246	Re-build the Townsend – Church 138 kV circuit		DPL (100%)
b1247	Re-build the Glasgow – Cecil 138 kV circuit		DPL (72.06%) / PECO (27.94%)
b1248	Install two 15 MVAR capacitor at Loretto 69 kV		DPL (100%)
b1249	Reconfigure the existing Sussex 69 kV capacitor		DPL (100%)
b1603	Upgrade 19 miles conductor of the Wattsville - Signepost - Stockton - Kenney 69 kV circuit		DPL (100%)
b1604	Replace CT at Reybold 138 kV substation		DPL (100%)
b1723	Replace strand bus and disconnect switch at Glasgow 138 kV substation		DPL (100%)
b1899.1	Install new variable reactors at Indian River and Nelson 138 kV		DPL (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-3.

**Delmarva Power & Light Company (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1899.2	Install new variable reactors at Cedar Creek 230 kV		DPL (100%)
b1899.3	Install new variable reactors at New Castle 138 kV and Easton 69 kV		DPL (100%)



## SCHEDULE 12 – APPENDIX

### (5) Metropolitan Edison Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0215	Install 230Kv series reactor and 2- 100MVAR PLC switched capacitors at Hunterstown	AEC (6.68%) / APS (3.95%) / ConEd (0.42%) / DPL (9.06%) / JCPL (16.78%) / ME (10.49%) / Neptune* (1.68%) / PECO (18.92%) / PPL (7.52%) / PSEG (22.57%) / RE (0.34%) / UGI (0.95%) / ECP** (0.64%)
b0404.1	Replace South Reading 230 kV breaker 107252	ME (100%)
b0404.2	Replace South Reading 230 kV breaker 100652	ME (100%)
b0575.1	Rebuild Hunterstown – Texas Eastern Tap 115 kV	ME (100%)
b0575.2	Rebuild Texas Eastern Tap – Gardners 115 kV and associated upgrades at Gardners including disconnect switches	ME (100%)
b0650	Reconductor Jackson – JE Baker – Taxville 115 kV line	ME (100%)
b0652	Install bus tie circuit breaker on Yorkana 115 kV bus and expand the Yorkana 230 kV ring bus by one breaker so that the Yorkana 230/115 kV banks 1, 3, and 4 cannot be lost for either B-14 breaker fault or a 230 kV line or bank fault with a stuck breaker	ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## (5) Metropolitan Edison Company

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0653	Construct a 230 kV Bernville station by tapping the North Temple – North Lebanon 230 kV line. Install a 230/69 kV transformer at existing Bernville 69 kV station		ME (100%)
b1000	Replace Portland 115kV breaker '95312'		ME (100%)
b1001	Replace Portland 115kV breaker '92712'		ME (100%)
b1002	Replace Hunterstown 115 kV breaker '96392'		ME (100%)
b1003	Replace Hunterstown 115 kV breaker '96292'		ME (100%)
b1004	Replace Hunterstown 115 kV breaker '99192'		ME (100%)
b1061	Replace existing Yorkana 230/115 kV transformer banks 1 and 4 with a single, larger transformer similar to transformer bank #3		ME (100%)
b1061.1	Replace the Yorkana 115 kV breaker '97282'		ME (100%)
b1061.2	Replace the Yorkana 115 kV breaker 'B282'		ME (100%)
b1302	Replace the limiting bus conductor and wave trap at the Jackson 115 kV terminal of the Jackson – JE Baker Tap 115 kV line		ME (100%)
b1365	Reconductor the Middletown – Collins 115 kV (975) line 0.32 miles of 336 ACSR		ME (100%)

\* Neptune Regional Transmission System, LLC

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**(5) Metropolitan Edison Company**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b1366	Reconductor the Collins – Cly – Newberry 115 kV (975) line 5 miles with 795 ACSR		ME (100%)
b1727	Reconductor 2.4 miles of existing 556 and 795 ACSR from Harley Davidson to Pleasureville 115 kV with 795 ACSS to raise the ratings		ME (100%)
b1800	Install a 500 MVAR SVC at the existing Hunterstown 500kV substation		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>ATSI (0.42%) / BGE (55.33%) / DL (0.15%) / DPL (19.19%) / ME (24.91%)</u>
b1801	Build a 250 MVAR SVC at Altoona 230 kV		AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / Neptune* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)

**(5) Metropolitan Edison Company**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1816.5	Replace SCCIR (Sub-conductor) at Hunterstown Substation on the No. 1, 230/115 kV transformer	ME (100%)
b1999	Replace limiting wave trap, circuit breaker, substation conductor, relay and current transformer components at Northwood	ME (100%)
b2000	Replace limiting wave trap on the Glendon - Hosensack line	ME (100%)
b2001	Replace limiting circuit breaker and substation conductor transformer components at Portland 230kV	ME (100%)
b2002	Northwood 230/115 kV Transformer upgrade	ME (100%)
b2023	Construct a new North Temple - Riverview - Cartech 69 kV line (4.7 miles) with 795 ACSR	ME (100%)
b2024	Upgrade 4/0 substation conductors at Middletown 69 kV	ME (100%)
b2025	Upgrade 4/0 and 350 Cu substation conductors at the Middletown Junction terminal of the Middletown Junction - Wood Street Tap 69 kV line	ME (100%)
b2026	Upgrade an OC protection relay at the Baldy 69 kV substation	ME (100%)
b2148	Install a 115 kV 28.8 MVAR capacitor at Pleasureville substation	ME (100%)

**(5) Metropolitan Edison Company**

Required Transmission Enhancements   Annual Revenue Requirement   Responsible Customer(s)

b2149	Upgrade substation riser on the Smith St. - York Inc. 115 kV line		ME (100%)
b2150	Upgrade York Haven structure 115 kV bus conductor on Middletown Jct. - Zions View 115 kV		ME (100%)

\* Neptune Regional Transmission System, LLC

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## SCHEDULE 12 – APPENDIX

### (7) Pennsylvania Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.1  Build 500 kV substation in PENELEC – Tap the Keystone – Juniata and Conemaugh – Juniata 500 kV, connect the circuits with a breaker and half scheme, and install new 400 MVAR capacitor		AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0284.3  Replace wave trap and upgrade a bus section at Keystone 500 kV – on the Keystone – Airydale 500 kV		AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

\* Neptune Regional Transmission System, LLC

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0285.1	Replace wave trap at Keystone 500 kV – on the Keystone – Conemaugh 500 kV	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0285.2	Replace wave trap and relay at Conemaugh 500 kV – on the Conemaugh – Keystone 500 kV	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

\* Neptune Regional Transmission System, LLC

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0349	Upgrade Rolling Meadows-Gore Jct 115 kV	PENELEC (100%)
b0360	Construction of a ring bus on the 345 kV side of Wayne substation	PENELEC (100%)
b0365	Add a 50 MVAR, 230 kV cap bank at Altoona 230 kV	PENELEC (100%)
b0369	Install 100 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0370	Install 500 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0376	Install 300 MVAR capacitor at Conemaugh 500 kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.11%) / BGE (14.99%) / DL (0.25%) / ECP (0.76%) / HTP (0.70%) / JCPL (19.52%) / ME (11.95%) / NEPTUNE (2.12%) / PECO (19.24%) / PSEG (24.38%) / RE (0.98%)</u></p>
b0442	Spare Keystone 500/230 kV transformer	PENELEC (100%)
b0515	Replace Lewistown circuit breaker 1LY Yeagertown	PENELEC (100%)
b0516	Replace Lewistown circuit breaker 2LY Yeagertown	PENELEC (100%)
b0517	Replace Shawville bus section circuit breaker	PENELEC (100%)
b0518	Replace Homer City circuit breaker 201 Johnstown	PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0519	Replace Keystone circuit breaker 4 Transformer - 20	PENELEC (100%)
b0549	Install 250 MVAR capacitor at Keystone 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.17%) / ATSI (0.35%) / BGE (20.18%) / DL (0.15%) / ECP (0.60%) / HTP (0.54%) / JCPL (17.10%) / ME (13.58%) / NEPTUNE (1.86%) / PECO (19.27%) / PSEG (20.38%) / RE (0.82%)</u></p>
b0550	Install 25 MVAR capacitor at Lewis Run 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0551	Install 25 MVAR capacitor at Saxton 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0552	Install 50 MVAR capacitor at Altoona 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0553	Install 50 MVAR capacitor at Raystown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0555	Install 100 MVAR capacitor at Johnstown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0556	Install 50 MVAR capacitor at Grover 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0557	Install 75 MVAR capacitor at East Towanda 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0563	Install 25 MVAR capacitor at Farmers Valley 115 kV substation	PENELEC (100%)
b0564	Install 10 MVAR capacitor at Ridgeway 115 kV substation	PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0654	Reconfigure the Cambria Slope 115 kV and Wilmore Junction 115 kV stations to eliminate Wilmore Junction 115 kV 3-terminal line		PENELEC (100%)
b0655	Reconfigure and expand the Glade 230 kV ring bus to eliminate the Glade Tap 230 kV 3-terminal line		PENELEC (100%)
b0656	Add three breakers to form a ring bus at Altoona 230 kV		PENELEC (100%)
b0794	Upgrade the Homer City 230 kV breaker 'Pierce Road'		PENELEC (100%)
b1005	Replace Glory 115 kV breaker '#7 XFMR'		PENELEC (100%)
b1006	Replace Shawville 115 kV breaker 'NO.14 XFMR'		PENELEC (100%)
b1007	Replace Shawville 115 kV breaker 'NO.15 XFMR'		PENELEC (100%)
b1008	Replace Shawville 115 kV breaker '#1B XFMR'		PENELEC (100%)
b1009	Replace Shawville 115 kV breaker '#2B XFMR'		PENELEC (100%)
b1010	Replace Shawville 115 kV breaker 'Dubois'		PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1011	Replace Shawville 115 kV breaker 'Philipsburg'	PENELEC (100%)
b1012	Replace Shawville 115 kV breaker 'Garman'	PENELEC (100%)
b1059	Replace a CRS relay at Hooversville 115 kV station	PENELEC (100%)
b1060	Replace a CRS relay at Rachel Hill 115 kV station	PENELEC (100%)
b1153	Upgrade Conemaugh 500/230 kV transformer and add a new line from Conemaugh-Seward 230 kV	AEC (3.72%) / APS (6.23%) / BGE (16.75%) / ConEd (0.39%) / DL (0.32%) / JCPL (12.52%) / ME (6.87%) / PECO (11.49%) / PEPCO (0.55%) / PPL (15.36%) / PSEG (20.44%) / RE (0.71%) / NEPTUNE*(1.70%) / ECP** (2.95%)
b1153.1	Revise the reclosing on the Shelocta 115 kV breaker 'Lucerne'	PENELEC (100%)
b1169	Replace Shawville 115 kV breaker '#1A XFMR'	PENELEC (100%)
b1170	Replace Shawville 115 kV breaker '#2A XFMR'	PENELEC (100%)
b1277	Build a new Osterburg East – Bedford North 115 kV Line, 5.7 miles of 795 ACSR	PENELEC (100%)
b1278	Install 25 MVAR Capacitor Bank at Somerset 115 kV	PENELEC (100%)

## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1367	Replace the Cambria Slope 115/46 kV 50 MVA transformer with 75 MVA	PENELEC (100%)
b1368	Replace the Claysburg 115/46 kV 30 MVA transformer with 75 MVA	PENELEC (100%)
b1369	Replace the 4/0 CU substation conductor with 795 ACSR on the Westfall S21 Tap 46 kV line	PENELEC (100%)
b1370	Install a 3rd 115/46 kV transformer at Westfall	PENELEC (100%)
b1371	Reconductor 2.6 miles of the Claysburg – HCR 46 kV line with 636 ACSR	PENELEC (100%)
b1372	Replace 4/0 CU substation conductor with 795 ACSR on the Hollidaysburg – HCR 46 kV	PENELEC (100%)
b1373	Re-configure the Erie West 345 kV substation, add a new circuit breaker and relocate the Ashtabula line exit	PENELEC (100%)
b1374	Replace wave traps at Raritan River and Deep Run 115 kV substations with higher rated equipment for both B2 and C3 circuits	PENELEC (100%)
b1535	Reconductor 0.8 miles of the Gore Junction – ESG Tap 115 kV line with 795 ACSS	PENELEC (100%)

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\*\* East Coast Power, L.L.C.

## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1607	Reconductor the New Baltimore - Bedford North 115 kV	PENELEC (100%)
b1608	Construct a new 345/115 kV substation and loop the Mansfield - Everts 115 kV	APS (8.57%) / ConEd (0.47%) / PECO (1.71%) / PENELEC (89.25%)
b1609	Construct Four Mile Junction 230/115 kV substation. Loop the Erie South - Erie East 230 kV line, Buffalo Road - Corry East and Buffalo Road - Erie South 115 kV lines	APS (4.86%) / PENELEC (95.14%)
b1610	Install a new 230 kV breaker at Yeagertown	PENELEC (100%)
b1713	Install a 345 kV breaker at Erie West and relocate Ashtabula 345 kV line	PENELEC (100%)
b1769	Install a 75 MVAR cap bank on the Four Mile 230 kV bus	PENELEC (100%)
b1770	Install a 50 MVAR cap bank on the Buffalo Road 115 kV bus	PENELEC (100%)
b1802	Build a 100 MVAR Fast Switched Shunt and 200 MVAR Switched Shunt at Mansfield 345 kV	AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / NEPTUNE* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)

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\*\* East Coast Power, L.L.C.

## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1821	Replace the Erie South 115 kV breaker 'Union City'	PENELEC (100%)
b1943	Construct a 115 kV ring bus at Claysburg Substation. Bedford North and Saxton lines will no longer share a common breaker	PENELEC (100%)
b1944	Reconductor Eclipse substation 115 kV bus with 1033 kcmil conductor	PENELEC (100%)
b1945	Install second 230/115 kV autotransformer at Johnstown	PENELEC (100%)
b1966	Replace the 1200 Amp Line trap at Lewistown on the Raystown-Lewistown 230 kV line and replace substation conductor at Lewistown	PENELEC (100%)
b1967	Replace the Blairsville 138/115 kV transformer	PENELEC (100%)
b1990	Install a 25 MVAR 115 kV Capacitor at Grandview	PENELEC (100%)
b1991	Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the Homer City-Stolle Road 345 kV line into Farmers Valley	PENELEC (100%)
b1992	Reconductor Cambria Slope-Summit 115kV with 795 ACSS Conductor	PENELEC (100%)

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\*\* East Coast Power, L.L.C.



## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1993	Relocate the Erie South 345 kV line terminal	APS (10.09%) / ECP** (0.45%) / HTP (0.49%) / JCPL (5.14%) / Neptune* (0.54%) / PENELEC (70.71%) / PSEG (12.10%) / RE (0.48%)
b1994	Convert Lewis Run-Farmers Valley to 230 kV using 1033.5 ACSR conductor. Project to be completed in conjunction with new Farmers Valley 345/230 kV transformation	APS (33.20%) / ECP** (0.44%) / HTP (0.44%) / JCPL (8.64%) / ME (5.52%) / Neptune (0.86%) / PENELEC (36.81%) / PSEG (13.55%) / RE (0.54%)
b1995	Change CT Ratio at Claysburg	PENELEC (100%)
b1996.1	Replace 600 Amp Disconnect Switches on Ridgeway-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1996.2	Reconductor Ridgeway and Whetstone 115 kV Bus	PENELEC (100%)
b1996.3	Replace Wave Trap at Ridgeway	PENELEC (100%)
b1996.4	Change CT Ratio at Ridgeway	PENELEC (100%)
b1997	Replace 600 Amp Disconnect Switches on Dubois-Harvey Run-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)

**Pennsylvania Electric Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville		PENELEC (100%)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## SCHEDULE 12 – APPENDIX

### (8) PECO Energy Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0171.1	Replace two 500 kV circuit breakers and two wave traps at Elroy substation to increase rating of Elroy - Hosensack 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPSCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.78%) / DPL (6.88%) / JCPL (10.93%) / ME (2.74%) / NEPTUNE (0.27%) / PECO (48.97%) / PSEG (24.45%) / RE (0.98%)</u></p>
b0180	Replace Whitpain 230kV circuit breaker #165	PECO (100%)
b0181	Replace Whitpain 230kV circuit breaker #J105	PECO (100%)
b0182	Upgrade Plymouth Meeting 230kV circuit breaker #125	PECO (100%)
b0205	Install three 28.8Mvar capacitors at Planebrook 35kV substation	PECO (100%)
b0206	Install 161Mvar capacitor at Planebrook 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0207	Install 161Mvar capacitor at Newlinville 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)
b0208	Install 161Mvar capacitor Heaton 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)
b0209	Install 2% series reactor at Chichester substation on the Chichester - Mickleton 230kV circuit	AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)
b0264	Upgrade Chichester – Delco Tap 230 kV and the PECO portion of the Delco Tap – Mickleton 230 kV circuit	AEC (88.94%) / ConEd (1.04%) / JCPL (9.38%) / Neptune* (0.64%)
b0266	Replace two wave traps and ammeter at Peach Bottom, and two wave traps and ammeter at Newlinville 230 kV substations	PECO (100%)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)†
		<b><u>DFAX Allocation:</u></b> PECO (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLCPECO Energy Company (cont.)

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.1	Add a new 230 kV circuit between Whitpain and Heaton substations	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.2	Reconductor the Whitpain 1 – Plymtg 1 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.3	Convert the Heaton bus to a ring bus	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.4	Reconductor the Heaton – Warminster 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.5	Reconductor Warminster – Buckingham 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269.6	Add a new 500 kV breaker at Whitpain between #3 transformer and 5029 line	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PECO (100%)</p>
b0269.7	Replace North Wales 230 kV breaker #105	PECO (100%)
b0280.1	Install 161 MVAR capacitor at Warrington 230 kV substation	PECO 100%
b0280.2	Install 161 MVAR capacitor at Bradford 230 kV substation	PECO 100%
b0280.3	Install 28.8 MVAR capacitor at Warrington 34 kV substation	PECO 100%
b0280.4	Install 18 MVAR capacitor at Waverly 13.8 kV substation	PECO 100%

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\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

## PECO Energy Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0287	Install 600 MVAR Dynamic Reactive Device in Whitpain 500 kV vicinity		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.78%) / DPL (6.88%) / JCPL (10.93%) / ME (2.74%) / NEPTUNE (0.27%) / PECO (48.97%) / PSEG (24.45%) / RE (0.98%)</u></p>
b0351	Reconductor Tunnel – Grays Ferry 230 kV		PECO (100%)
b0352	Reconductor Tunnel – Parrish 230 kV		PECO (100%)
b0353.1	Install 2% reactors on both lines from Eddystone – Llanerch 138 kV		PECO (100%)
b0353.2	Install identical second 230/138 kV transformer in parallel with existing 230/138 kV transformer at Plymouth Meeting		PECO 100%
b0353.3	Replace Whitpain 230 kV breaker 135		PECO (100%)
b0353.4	Replace Whitpain 230 kV breaker 145		PECO (100%)

\* Neptune Regional Transmission System, LLC

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††† Cost allocations associated with below 500 kV elements of the project

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0354	Eddystone – Island Road Upgrade line terminal equipment	PECO 100%
b0355	Reconductor Master – North Philadelphia 230 kV line	PECO 100%
b0357	Reconductor Buckingham – Pleasant Valley 230 kV	ConEd (1.05%) / JCPL (36.78%) / Neptune* (4.41%) / PSEG (53.57%) / RE (2.30%) / ECP** (1.89%)
b0359	Reconductor North Philadelphia – Waneeta 230 kV circuit	PECO 100%
b0402.1	Replace Whitpain 230 kV breaker #245	PECO (100%)
b0402.2	Replace Whitpain 230 kV breaker #255	PECO (100%)
b0438	Spare Whitpain 500/230 kV transformer	PECO (100%)
b0443	Spare Peach Bottom 500/230 kV transformer	PECO (100%)
b0505	Reconductor the North Wales – Whitpain 230 kV circuit	AEC (8.56%) / ConEd (0.21%) / DPL (7.74%) PECO (83.49%)
b0506	Reconductor the North Wales – Hartman 230 kV circuit	AEC (8.56%) / ConEd (0.21%) / DPL (7.74%) PECO (83.49%)
b0507	Reconductor the Jarrett – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) PECO (83.66%)
b0508.1	Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit	PECO (100%)
b0509	Reconductor the Jarrett – Heaton 230 kV circuit	PECO (100%)



## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0727	Rebuild Bryn Mawr – Plymouth Meeting 138 kV line	AEC (1.25%) / DPL (3.11%) / PECO (95.64%)
b0789	Reconductor the line to provide a normal rating of 677 MVA and an emergency rating of 827 MVA	AEC (0.72%) / JCPL (17.36%) / NEPTUNE* (1.70%) / PECO (44.47%) / ECP** (0.92%) / PSEG (33.52%) / RE (1.31%)
b0790	Reconductor the Bradford – Planebrook 230 kV Ckt. 220-31 to provide a normal rating of 677 MVA and emergency rating of 827 MVA	JCPL (17.30%) / NEPTUNE* (1.69%) / PECO (45.09%) / ECP** (0.93%) / PSEG (33.68%) / RE (1.31%)
b0829.1	Replace Whippain 230 kV breaker '155'	PECO (100%)
b1073	Install 2 new 230 kV breakers at Planebrook (on the 220-02 line terminal and on the 230 kV side of the #9 transformer)	PECO (100%)
b0829.2	Replace Whippain 230 kV breaker '525'	PECO (100%)
b0829.3	Replace Whippain 230 kV breaker '175'	PECO (100%)
b0829.4	Replace Plymouth Meeting 230 kV breaker '225'	PECO (100%)
b0829.5	Replace Plymouth Meeting 230 kV breaker '335'	PECO (100%)
b0841	Move the connection points for the 2nd Plymouth Meeting 230/138 kV XFMR	PECO (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0842	Install a 2nd 230/138 kV XFMR and 35 MVAR CAP at Heaton 138 kV bus	PECO (100%)
b0842.1	Replace Heaton 138 kV breaker '150'	PECO (100%)
b0843	Install a 75 MVAR CAP at Llanerch 138 kV bus	PECO (100%)
b0844	Move the connection point for the Llanerch 138/69 kV XFMR	PECO (100%)
b0887	Replace Richmond-Tacony 69 kV line	PECO (100%)
b0920	Replace station cable at Whitpain and Jarrett substations on the Jarrett - Whitpain 230 kV circuit	PECO (100%)
b1014.1	Replace Circuit breaker, Station Cable, CTs and Wave Trap at Eddystone 230 kV	PECO (100%)
b1014.2	Replace Circuit breaker, Station Cable, CTs Disconnect Switch and Wave Trap at Island Rd. 230 kV	PECO (100%)
b1015	Replace Breakers #115 and #125 at Printz 230 kV substation	PECO (100%)
b1156.1	Upgrade at Richmond 230 kV breaker '525'	PECO (100%)
b1156.2	Upgrade at Richmond 230 kV breaker '415'	PECO (100%)
b1156.3	Upgrade at Richmond 230 kV breaker '475'	PECO (100%)
b1156.4	Upgrade at Richmond 230 kV breaker '575'	PECO (100%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1156.5	Upgrade at Richmond 230 kV breaker '185'		PECO (100%)
b1156.6	Upgrade at Richmond 230 kV breaker '285'		PECO (100%)
b1156.7	Upgrade at Richmond 230 kV breaker '85'		PECO (100%)
b1156.8	Upgrade at Waneeta 230 kV breaker '425'		PECO (100%)
b1156.9	Upgrade at Emilie 230 kV breaker '815'		PECO (100%)
b1156.10	Upgrade at Plymouth Meeting 230 kV breaker '265'		PECO (100%)
b1156.11	Upgrade at Croydon 230 kV breaker '115'		PECO (100%)
b1156.12	Replace Emilie 138 kV breaker '190'		PECO (100%)
b1178	Add a second 230/138 kV transformer at Chichester. Add an inductor in series with the parallel transformers		JCPL (4.14%) / Neptune (0.44%) / PECO (82.19%) / ECP (0.33%) / HTP (0.32%) / PSEG (12.10%) / RE (0.48%)
b1179	Replace terminal equipment at Eddystone and Saville and replace underground section of the line		PECO (100%)
b1180.1	Replace terminal equipment at Chichester		PECO (100%)
b1180.2	Replace terminal equipment at Chichester		PECO (100%)
b1181	Install 230/138 kV transformer at Eddystone		PECO (100%)

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\*\* East Coast Power, L.L.C.

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1182	Reconductor Chichester – Saville 138 kV line and upgrade terminal equipment	JCPL (5.08%) / Neptune (0.54%) / PECO (78.85%) / ECP (0.39%) / HTP (0.38%) / PSEG (14.20%) / RE (0.56%)
b1183	Replace 230/69 kV transformer #6 at Cromby. Add two 50 MVAR 230 kV banks at Cromby	PECO (100%)
b1184	Add 138 kV breakers at Cromby, Perkiomen, and North Wales; add a 35 MVAR capacitor at Perkiomen 138 kV	PECO (100%)
b1185	Upgrade Eddystone 230 kV breaker #365	PECO (100%)
b1186	Upgrade Eddystone 230 kV breaker #785	PECO (100%)
b1197	Reconductor the PECO portion of the Burlington – Croydon circuit	PECO (100%)
b1198	Replace terminal equipments including station cable, disconnects and relay at Conowingo 230 kV station	PECO (100%)
b1338	Replace Printz 230 kV breaker ‘225’	PECO (100%)
b1339	Replace Printz 230 kV breaker ‘315’	PECO (100%)
b1340	Replace Printz 230 kV breaker ‘215’	PECO (100%)
b1398.6	Reconductor the Camden – Richmond 230 kV circuit (PECO portion) and upgrade terminal equipments at Camden substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.8	Reconductor Richmond – Waneeta 230 kV and replace terminal equipments at Richmond and Waneeta substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.12	Replace Graysferry 230 kV breaker ‘115’	PECO (100%)
b1398.13	Upgrade Peach Bottom 500 kV breaker ‘225’	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)†
b1398.14	Replace Whitpain 230 kV breaker ‘105’	PECO (100%)
b1590.1	Upgrade the PECO portion of the Camden – Richmond 230 kV to a six wire conductor and replace terminal equipment at Richmond.	BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPCO (1.93%) / PPL (2.46%) / ECP** (0.16%)
b1591	Reconductor the underground portion of the Richmond – Waneeta 230 kV and replace terminal equipment	BGE (4.54%) / DL (0.27%) / ME (1.04%) / HTP (0.03%) / PECO (88.08%) / PEPCO (2.79%) / PPL (3.25%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1717	Install a second Waneeta 230/138 kV transformer on a separate bus section	HTP (0.04%) / PECO (99.96%)
b1718	Reconductor the Crescentville - Foxchase 138 kV circuit	PECO (100%)
b1719	Reconductor the Foxchase - Bluegrass 138 kV circuit	PECO (100%)
b1720	Increase the effective rating of the Eddystone 230/138 kV transformer by replacing a circuit breaker at Eddystone	PECO (100%)
b1721	Increase the rating of the Waneeta - Tuna 138 kV circuit by replacing two 138 kV CTs at Waneeta	PECO (100%)
b1722	Increase the normal rating of the Cedarbrook - Whitemarsh 69 kV circuit by changing the CT ratio and replacing station cable at Whitemarsh 69 kV	PECO (100%)
b1768	Install 39 MVAR capacitor at Cromby 138 kV bus	PECO (100%)
b1900	Add a 3rd 230 kV transmission line between Chichester and Linwood substations and remove the Linwood SPS	PECO (69.62%) / JCPL (6.02%) / ATSI (1.23%) / PSEG (20.83%) / RE (0.83%) / NEPTUNE* (0.59%) / ECP** (0.45%) / HTP (0.43%)
b2140	Install a 3rd Emilie 230/138 kV transformer	PECO (97.04%) / ECP** (1.62%) / HTP (1.34%)
b2145	Replace two sections of conductor inside Richmond substation	PECO (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## SCHEDULE 12 – APPENDIX

### (9) PPL Electric Utilities Corporation

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0074	Rebuild 12 miles of S. Akron – Berks 230 kV to double circuit, looping Met Ed's S. Lebanon – S. Reading line into Berks; replacement of S. Reading 230 kV breaker 107252	PPL (100%)
b0171.2	Replace wavetrap at Hosensack 500kV substation to increase rating of Elroy - Hosensack 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.78%) / DPL (6.88%) / JCPL (10.93%) / ME (2.74%) / NEPTUNE (0.27%) / PECO (48.97%) / PSEG (24.45%) / RE (0.98%)</u></p>
b0172.1	Replace wave trap at Alburtis 500kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)</u></p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.2	Replace two wave traps at Juniata 500 kV – on the two Juniata – Airydale 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.11%) / BGE (14.99%) / DL (0.25%) / ECP (0.76%) / HTP (0.70%) / JCPL (19.52%) / ME (11.95%) / NEPTUNE (2.12%) / PECO (19.24%) / PSEG (24.38%) / RE (0.98%)</u></p>
b0284.4	Changes at Juniata 500 kV substation	PPL (100%)
b0293.1	Replace wavetrap at the Martins Creek 230 kV bus	PPL (100%)
b0293.2	Raise the operating temperature of the 2-1590 ACSR to 140C for the Martins Creek – Portland 230 kV circuit	PPL (100%)
b0440	Spare Juniata 500/230 kV transformer	PPL (100%)
b0468	Build a new substation with two 150 MVA transformers between Dauphin and Hummelstown 230/69 kV substations by sectionalizing the Middletown Junction – New Lebanon 230 kV line	JCPL (4.55%) / Neptune* (0.37%) / PECO (1.79%) / PENELEC (0.33%) / PPL (86.63%) / ECP** (0.18%) / PSEG (5.93%) / RE (0.22%)
b0469	Install 130 MVAR capacitor at West Shore 230 kV line	PPL (100%)

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\*\*\* Hudson Transmission Partners, LLC



**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0487  Build new 500 kV transmission facilities from Susquehanna to Pennsylvania – New Jersey border at Bushkill		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  ECP (2.63%) / HTP (2.97%) / JCPL (30.22%) / NEPTUNE (3.81%) / PSEG (58.04%) / RE (2.33%)</p>
b0487.1  Install Lackawanna 500/230 kV transformer and upgrade 230 kV substation and switchyard		PENELEC (16.90%) / PPL (77.59%) / ECP** (0.19%) / PSEG (5.13%) / RE (0.19%)
b0500.1  Conastone – Otter Creek 230 kV – Reconductor approximately 17.2 miles of 795 kmil ACSR with new 795 kmil ACSS operated at 160 deg C		AEC (6.27%) / DPL (8.65%) / JCPL (14.54%) / ME (10.59%) / Neptune* (1.37%) / PECO (15.66%) / PPL (21.02%) / ECP** (0.57%) / PSEG (20.56%) / RE (0.77%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

The Annual Revenue Requirements associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-8G.

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0558	Install 250 MVAR capacitor at Juniata 500 kV substation	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0593	Eldred – Pine Grove 69 kV line Rebuild Part 2: 8 miles	PPL (100%)
b0595	Rebuild Lackawanna – Edella 69 kV line to double circuit	PPL (100%)
b0596	Reconductor and rebuild Stanton – Providence 69 kV #1 and #2 lines with 69 kV design; approximately 8 miles total	PPL (100%)
b0597	Reconductor Suburban – Providence 69 kV #1 and resectionalize the Suburban 69 kV lines	PPL (100%)
b0598	Reconductor Suburban Taps #1 and #2 for 69 kV line portions	PPL (100%)
b0600	Tripp Park Substation: 69 kV tap off Stanton – Providence 69 kV line #3 to new substation	PPL (100%)
b0601	Jessup Substation: New 138/69 kV tap off of Peckville – Jackson 138/69 kV line	PPL (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0604	Add 150 MVA, 230/138/69 transformer #6 to Harwood substation		PPL (100%)
b0605	Reconductor Stanton – Old Forge 69 kV line and resectionalize the Jenkins – Scranton 69 kV #1 and #2 lines		PPL (100%)
b0606	New 138 kV tap off Monroe – Jackson 138 kV #1 line to Bartonsville substation		PPL (100%)
b0607	New 138 kV taps off Monroe – Jackson 138 kV lines to Stroudsburg substation		PPL (100%)
b0608	New 138 kV tap off Siegfried – Jackson 138 kV #2 to transformer #2 at Gilbert substation		PPL (100%)
b0610	At South Farmersville substation, a new 69 kV tap off Nazareth – Quarry #2 to transformer #2		PPL (100%)
b0612	Rebuild Siegfried – North Bethlehem portion (6.7 miles) of Siegfried – Quarry 69 kV line		PPL (100%)
b0613	East Tannersville Substation: New 138 kV tap to new substation		PPL (100%)
b0614	Elroy substation expansion and new Elroy – Hatfield 138/69 kV double circuit lines (1.9 miles)		PPL (100%)
b0615	Reconductor and rebuild 12 miles of Seidersville – Quakerstown 138/69 kV and a new 75 MVA, 230/69 kV transformer #4		PPL (100%)
b0616	New Springfield 230/69 kV substation and transmission line connections		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0620	New 138 kV line and terminal at Monroe 230/138 substation		PPL (100%)
b0621	New 138 kV line and terminal at Siegfried 230/138 kV substation and add a second circuit to Siegfried – Jackson for 8.0 miles		PPL (100%)
b0622	138 kV yard upgrades and transmission line rearrangements at Jackson 138/69 kV substation		PPL (100%)
b0623	New West Shore – Whitehill Taps 138/69 kV double circuit line (1.3 miles)		PPL (100%)
b0624	Reconductor Cumberland – Wertzville 69 kV portion (3.7 miles) of Cumberland – West Shore 69 kV line		PPL (100%)
b0625	Reconductor Mt. Allen – Rossmoyne 69 kV portions (1.6 miles) of West Shore – Cumberland #3 and #4 lines		PPL (100%)
b0627	Replace UG cable from Walnut substation to Center City Harrisburg substation for higher ampacity (0.25 miles)		PPL (100%)
b0629	Lincoln substation: 69 kV tap to convert to modified Twin A		PPL (100%)
b0630	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild from Landisville Tap – Mt. Joy (2 miles)		PPL (100%)
b0631	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild to double circuit from Mt. Joy – Donegal (2 miles)		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0632	Terminate new S. Manheim – Donegal 69 kV circuit into S. Manheim 69 kV #3		PPL (100%)
b0634	Rebuild S. Manheim – Fuller 69 kV portion (1.0 mile) of S. Manheim – West Hempfield 69 kV #3 line into a 69 kV double circuit		PPL (100%)
b0635	Reconductor Fuller Tap – Landisville 69 kV (4.1 miles) into a 69 kV double circuit		PPL (100%)
b0703	Berks substation modification on Berks – South Akron 230 kV line. Modification will isolate the line fault on the South Akron line and will allow Berks transformer #2 to be energized by the South Lebanon 230 kV circuit		PPL (100%)
b0705	New Derry – Millville 69 kV line		PPL (100%)
b0707	Construct Bohemia – Twin Lakes 69 kV line, install a 10.9 MVAR capacitor bank near Bohemia 69 kV substation		PPL (100%)
b0708	New 69 kV double circuit from Jackson – Lake Naomi Tap		PPL (100%)
b0709	Install new 69 kV double circuit from Carlisle – West Carlisle		PPL (100%)
b0710	Install a third 69 kV line from Reese’s Tap to Hershey substation		PPL (100%)
b0711	New 69 kV that taps West Shore – Cumberland 69 kV #1 to Whitehill 69 kV substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0712	Construct a new 69 kV line between Strassburg Tap and the Millwood – Engleside 69 kV #1 line		PPL (100%)
b0713	Construct a new 138 kV double circuit line between Dillersville Tap and the West Hempfield – Prince 138 kV line		PPL (100%)
b0714	Prepare Roseville Tap for 138 kV conversion		PPL (100%)
b0715	Transfer S. Akron – S. Manheim #1 and #2 lines from the S. Akron 69 kV Yard to the S. Akron 138 kV Yard; Install switches on S. Akron – S. Manheim 138 kV #1 and #2 lines		PPL (100%)
b0716	Add a second 69 kV line from Morgantown – Twin Valley		PPL (100%)
b0717	Rebuild existing Brunner Island – West Shore 230 kV line and add a second Brunner Island – West Shore 230 kV line		PPL (100%)
b0718	SPS scheme to drop 190 MVA of 69 kV radial load at West Shore and 56 MVA of 69 kV radial load at Cumberland		PPL (100%)
b0719	SPS scheme at Jenkins substation to open the Stanton #1 and Stanton #2 230 kV circuit breakers after the second contingency		PPL (100%)
b0791	Add a fourth 230/69 kV transformer at Stanton		PENELEC (9.55%) / PPL (90.45%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1074	Install motor operators on the Jenkins 230 kV '2W' disconnect switch and build out Jenkins Bay 3 and have MOD '3W' operated as normally open		PPL (100%)
b0881	Install motor operators on Susquehanna T21 - Susquehanna 230 kV line East CB at Susquehanna 230 kV switching station		PPL (100%)
b0908	Install motor operators at South Akron 230 kV		PPL (100%)
b0909	Convert Jenkins 230 kV yard into a 3-breaker ring bus		PPL (100%)
b0910	Install a second 230 kV line between Jenkins and Stanton		PPL (100%)
b0911	Install motor operators at Frackville 230 kV		PPL (100%)
b0912	Install 2, 10.8 MVAR capacitor banks at Scranton 69 kV		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0913	Extend Cando Tap to the Harwood-Jenkins #2 69 kV line		PPL (100%)
b0914	Build a 3rd 69 kV line from Harwood to Valmont Taps		PPL (100%)
b0915	Replace Walnut-Center City 69 kV cable		PPL (100%)
b0916	Reconductor Sunbury-Dalmatia 69 kV line		PPL (100%)
b1021	Install a new (#4) 138/69 kV transformer at Wescosville		PPL (100%)
b1196	Remove the Siegfried bus tie breaker and install a new breaker on the Martins Creek 230 kV line west bay to maintain two ties between the 230 kV buses		PPL (100%)
b1201	Rebuild the Hercules Tap to Double Circuit 69 kV		PPL (100%)
b1202	Mack-Macungie Double Tap, Single Feed Arrangement		PPL (100%)
b1203	Add the 2nd Circuit to the East Palmerton-Wagners-Lake Naomi 138/69 kV Tap		PPL (100%)
b1204	New Breinigsville 230-69 kV Substation		PPL (100%)
b1205	Siegfried-East Palmerton #1 69 kV Line- Install new 69 kV LSAB, Sectionalize, and Transfer Treichlers Substation		PPL (100%)



**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1206	Siegfried-Quarry #1 & #2 69 kV Lines- Rebuild 3.3 mi from Quarry Substation to Macada Taps	PPL (100%)
b1209	Convert Neffsville Taps from 69 kV to 138 kV Operation	PPL (100%)
b1210	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 1 – operate on the 69 kV system)	PPL (100%)
b1211	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 2 – operate on the 138 kV system)	PPL (100%)
b1212	New 138 kV Taps to Flory Mill 138/69 kV Substation	PPL (100%)
b1213	Convert East Petersburg Taps from 69 kV to 138 kV operation, install two 10.8 MVAR capacitor banks	PPL (100%)
b1214	Terminate South Manheim-Donegal #2 at South Manheim, Reduce South Manheim 69 kV Capacitor Bank, Resectionalize 69 kV	PPL (100%)
b1215	Reconductor and rebuild 16 miles of Peckville-Varden 69 kV line and 4 miles of Blooming Grove-Honesdale 69 kV line	PPL (100%)
b1216	Build approximately 2.5 miles of new 69 kV transmission line to provide a “double tap – single feed” connection to Kimbles 69/12 kV substation	PPL (100%)
b1217	Provide a “double tap – single feed” connection to Tafton 69/12 kV substation	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1524	Build a new Pocono 230/69 kV substation	PPL (100%)
b1524.1	Build approximately 14 miles new 230 kV South Pocono – North Pocono line	PPL (100%)
b1524.2	Install MOLSABs at Mt. Pocono substation	PPL (100%)
b1525	Build new West Pocono 230/69 kV Substation	PPL (100%)
b1525.1	Build approximately 14 miles new 230 kV Jenkins-West Pocono 230 kV Line	PPL (100%)
b1525.2	Install Jenkins 3E 230 kV circuit breaker	PPL (100%)
b1526	Install a new Honeybrook – Twin Valley 69/138 kV tie	PPL (100%)
b1527	Construct a new 230/69 kV North Lancaster substation. The sub will be supplied from the SAKR-BERK 230kV Line	PPL (100%)
b1527.1	Construct new 69/138 kV transmission from North Lancaster 230/69 kV sub to Brecknock and Honeybrook areas	PPL (100%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlerstown #1 & #2 69 kV lines at East Texas Substation	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1529	Add a double breaker 230 kV bay 3 at Hosensack		PPL (100%)
b1530	Replace Lock Haven 69kV ring bus with standard breaker and half design		PPL (100%)
b1532	Install new 32.4 MVAR capacitor bank at Sunbury		PPL (100%)
b1533	Rebuild Lycoming-Lock Haven #1 and Lycoming-Lock Haven #2 69kV lines		PPL (100%)
b1534	Rebuild 1.4 miles of the Sunbury-Milton 69kV		PPL (100%)
b1601	Re-configure the Breinigsville 500 kV substation with addition two 500 kV circuit breakers		AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)†
b1602	Re-configure the Elimsport 230 kV substation to breaker and half scheme and install 80 MVAR capacitor		PPL (100%)
b1740	Install a 90 MVAR cap bank on the Frackville 230 kV bus #207973		PPL (100%)
b1756	Install a 3rd West Shore 230/69 kV transformer		PPL (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1757	Install a 230 kV motor-operated air-break switch on the Clinton - Elimsport 230 kV line	PPL (100%)
b1758	Rebuild 1.65 miles of Columbia - Danville 69 kV line	PPL (100%)
b1759	Install a 69 kV 16.2 MVAR Cap at Milton substation	PPL (100%)
b1760	Install motor operated devices on the existing disconnect switches that are located on each side of all four 230 kV CBs at Stanton	PPL (100%)
b1761	Build a new Paupack - North 230 kV line (Approximately 21 miles)	PPL (100%)
b1762	Replace 3.7 miles of the existing 230 kV Blooming Grove - Peckville line by building 8.4 miles of new 230 kV circuit onto the Lackawanna - Hopatcong tower-line	PPL (100%)
b1763	Re-terminate the Peckville - Jackson and the Peckville - Varden 69 kV lines from Peckville into Lackawanna	PPL (100%)
b1764	Build a new 230-69 kV substations (Paupack)	PPL (100%)
b1765	Install a 16.2 MVAR capacitor bank at Bohemia 69-12 kV substation	PPL (100%)
b1766	Reconductor/rebuild 3.3 miles of the Siegfried - Quarry #1 and #2 lines	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1767	Install 6 motor-operated disconnect switches at Quarry substation		PPL (100%)
b1788	Install a new 500 kV circuit breaker at Wescosville		PPL (100%)
b1890	Add a second 230/69 kV transformer at North Pocono (NE/Pocono Reliability Project)		PPL (100%)
b1891	Build a new 230/138 kV Yard at Lackawanna (138 kV conversion from Lackawanna to Jenkins)		PPL (100%)
b1892	Rebuild the Throop Taps for 138 kV operation (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1893	Swap the Staton - Old Forge and Stanton - Brookside 69 kV circuits at Stanton (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1894	Rebuild and re-conductor 2.5 miles of the Stanton - Avoca 69 kV line		PPL (100%)
b1895	Rebuild and re-conductor 4.9 miles of the Stanton - Providence #1 69 kV line		PPL (100%)
b1896	Install a second 230/138 kV transformer and expand the 138 kV yard at Monroe		PPL (100%)
b1897	Build a new 230/138 kV substation at Jenkins (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1898	Install a 69 kV Tie Line between Richfield and Dalmatia substations		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2004	Replace the CTs and switch in South Akron Bay 4 to increase the rating		PPL (100%)
b2005	Replace the CTs and switch in SAKR Bay 3 to increase the rating of the Millwood-South Akron 230 kV Line and of the rating in Bay 3		PPL (100%)
b2006	Install North Lancaster 500/230 kV substation (below 500 kV portion)		AEC (1.10%) / ECP** (0.37%) / HTP (0.37%) / JCPL (9.61%) / ME (19.42%) / Neptune* (0.75%) / PECO (6.01%) / PPL (50.57%) / PSEG (11.35%) / RE (0.45%)
b2006.1	Install North Lancaster 500/230 kV substation (500 kV portion)		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>ME (22.53%) / PPL (77.47%)</u>
b2007	Install a 90 MVAR capacitor bank at the Frackville 230 kV Substation		PPL (100%)
b2158	Install 10.8 MVAR capacitor at West Carlisle 69/12 kV substation		PPL (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## SCHEDULE 12 – APPENDIX

### (10) Potomac Electric Power Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0146	Installation of (2) new 230 kV circuit breakers at Quince Orchard substation on circuits 23028 and 23029	PEPCO (100%)
b0219	Install two new 230 kV circuits between Palmers Corner and Blue Plains	PEPCO (100%)
b0228	Upgrade Burtonsville – Sandy Springs 230 kV circuit	PEPCO (100%)
b0238.1	Modify Dickerson Station H 230 kV	PEPCO (100%)
b0251	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0252	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0288	Brighton Substation – add 2 <sup>nd</sup> 1000 MVA 500/230 kV transformer, 2 500 kV circuit breakers and miscellaneous bus work	BGE (19.33%) / Dominion (17%) / PEPCO (63.67%)
b0319	Add a second 1000 MVA Bruches Hill 500/230 kV transformer	PEPCO (100%)
b0366	Install a 4 <sup>th</sup> Ritchie 230/69 kV transformer	PEPCO (100%)
b0367.1	Reconductor circuit “23035” for Dickerson – Quince Orchard 230 kV	AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)
b0367.2	Reconductor circuit “23033” for Dickerson – Quince Orchard 230 kV	AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.

## Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0375	Install 0.5% reactor at Dickerson on the Pleasant View – Dickerson 230 kV circuit	AEC (1.02%) / BGE (25.42%) / DPL (2.97%) / ME (1.72%) / PECO (3.47%) / PEPCO (65.40%)
b0467.1	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.66%) / BGE (22.09%) / ConEd (0.18%) / DPL (3.69%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.53%) / PEPCO (41.78%) / PPL (2.07%)
b0478	Reconductor the four circuits from Burches Hill to Palmers Corner	APS (1.68%) / BGE (1.83%) / PEPCO (96.49%)
b0496	Replace existing 500/230 kV transformer at Brighton	APS (5.67%) / BGE (29.68%) / Dominion (10.91%) / PEPCO (53.74%)
b0499	Install third Burches Hill 500/230 kV transformer	APS (3.54%) / BGE (7.31%) / PEPCO (89.15%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.



**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.7	Advance n0772 (Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.8	Advance n0773 (Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.9	Advance n0774 (Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.10	Advance n0775 (Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.11	Advance n0776 (Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.12	Advance n0777 (Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.13	Advance n0778 (Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.14	Advance n0779 (Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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<b>Required Transmission Enhancements</b>	<b>Annual Revenue Requirement</b>	<b>Responsible Customer(s)</b>
b0512.15  Advance n0780 (Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker)		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.16  Advance n0781 (Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker)		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.17	Advance n0782 (Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.18	Advance n0783 (Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.19	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.20	Advance n0785 (Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.21	Advance n0786 (Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.22	Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.23	Advance n0788 (Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.24	Advance n0789 (Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.25	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.26	Advance n0791 (Replace Chalk Point 230 Kv breaker (4C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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**Potomac Electric Power Company (cont.)**

<u>Required Transmission Enhancements</u>	<u>Annual Revenue Requirement</u>	<u>Responsible Customer(s)</u>
b0512.27	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.28	Advance n0793 (Replace Chalk Point 230 Kv breaker (6C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.29	Advance n0794 (Replace Chalk Point 230 Kv breaker (7C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0526	Build two Ritchie – Benning Station A 230 kV lines	AEC (0.77%) / BGE (16.76%) / DPL (1.22%) / JCPL (1.39%) / ME (0.59%) / Neptune* (0.13%) / PECO (2.10%) / PEPCO (74.86%) / PSEG (2.10%) / RE (0.08%)
b0561	Install 300 MVAR capacitor at Dickerson Station “D” 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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# **Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0562	Install 500 MVAR capacitor at Brighton 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0637	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0638	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0639	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0640	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0641	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0642	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0643	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0644	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0645	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0646	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0647	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0648	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0649	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0701	Expand Benning 230 kV station, add a new 250 MVA 230/69 kV transformer at Benning Station 'A', new 115 kV Benning switching station	BGE (30.57%) / PEPCO (69.43%)
b0702	Add a second 50 MVAR 230 kV shunt reactor at the Benning 230 kV substation	PEPCO (100%)
b0720	Upgrade terminal equipment on both lines	PEPCO (100%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0721	Upgrade Oak Grove – Ritchie 23061 230 kV line	PEPCO (100%)
b0722	Upgrade Oak Grove – Ritchie 23058 230 kV line	PEPCO (100%)
b0723	Upgrade Oak Grove – Ritchie 23059 230 kV line	PEPCO (100%)
b0724	Upgrade Oak Grove – Ritchie 23060 230 kV line	PEPCO (100%)
b0730	Add slow oil circulation to the four Bells Mill Road – Bethesda 138 kV lines, add slow oil circulation to the two Buzzard Point – Southwest 138 kV lines; increasing the thermal ratings of these six lines allows for greater adjustment of the O Street phase shifters	PEPCO (100%)
b0731	Implement an SPS to automatically shed load on the 34 kV Bells Mill Road bus for this N-2 condition. The SPS will be in effect for 2013 and 2014 until a third Bells Mill 230/34 kV is placed in-service in 2015	PEPCO (100%)
b0746	Upgrade circuit for 3,000 amps using the ACCR	AEC (0.73%) / BGE (31.05%) / DPL (1.45%) / PECO (2.46%) / PEPCO (62.88%) / PPL (1.43%)
b0747	Upgrade terminal equipment on both lines: Quince Orchard - Bells Mill 230 kV (030) and (028)	PEPCO (100%)
b0802	Advance n0259 (Replace Dickerson Station H Circuit Breaker 412A)	PEPCO (100%)
b0803	Advance n0260 (Replace Dickerson Station H Circuit Breaker 42A)	PEPCO (100%)
b0804	Advance n0261 (Replace Dickerson Station H Circuit Breaker 42C)	PEPCO (100%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0805 Advance n0262 (Replace Dickerson Station H Circuit Breaker 43A)		PEPCO (100%)
b0806 Advance n0264 (Replace Dickerson Station H Circuit Breaker 44A)		PEPCO (100%)
b0809 Advance n0267 (Replace Dickerson Station H Circuit Breaker 45B)		PEPCO (100%)
b0810 Advance n0270 (Replace Dickerson Station H Circuit Breaker 47A)		PEPCO (100%)
b0811 Advance n0726 (Replace Dickerson Station H Circuit Breaker SPARE )		PEPCO (100%)
b0845 Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker		PEPCO (100%)
b0846 Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker		PEPCO (100%)
b0847 Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker		PEPCO (100%)
b0848 Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker		PEPCO (100%)
b0849 Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker		PEPCO (100%)
b0850 Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker		PEPCO (100%)
b0851 Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker		PEPCO (100%)
b0852 Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker		PEPCO (100%)
b0853 Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker		PEPCO (100%)
b0854 Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker		PEPCO (100%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0855	Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker		PEPCO (100%)
b0856	Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker		PEPCO (100%)
b0857	Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker		PEPCO (100%)
b0858	Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker		PEPCO (100%)
b0859	Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker		PEPCO (100%)
b0860	Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker		PEPCO (100%)
b0861	Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker		PEPCO (100%)
b0862	Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker		PEPCO (100%)
b0863	Replace Chalk Point 230 kV breaker (1C) with 80 kA breaker		PEPCO (100%)
b1104	Replace Burtonsville 230 kV breaker '1C'		PEPCO (100%)
b1105	Replace Burtonsville 230 kV breaker '2C'		PEPCO (100%)
b1106	Replace Burtonsville 230 kV breaker '3C'		PEPCO (100%)
b1107	Replace Burtonsville 230 kV breaker '4C'		PEPCO (100%)
b1125	Convert the 138 kV line from Buzzard 138 - Ritchie 851 to a 230 kV line and Remove 230/138 kV Transformer at Ritchie and install a spare 230/138 kV transformer at Buzzard Pt		APS (4.74%) / PEPCO (95.26%)
b1126	Upgrade the 230 kV line from Buzzard 016 – Ritchie 059		APS (4.74%) / PEPCO (95.26%)



**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1592	Reconductor the Oak Grove – Bowie 230 kV circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1593	Reconductor the Bowie - Burtonsville 230 kV circuit and upgrade terminal equipments at Bowie and Burtonsville 230 kV substations		AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1594	Reconductor the Oak Grove – Bowie 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1595	Reconductor the Bowie – Burtonsville 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Burtonsville 230 kV substations		AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1596	Reconductor the Dickerson station “H” – Quince Orchard 230 kV ‘23032’ circuit and upgrade terminal equipments at Dickerson station “H” and Quince Orchard 230 kV substations		AEC (0.80%) / BGE (33.68%) / DPL (2.09%) / PECO (3.07%) / PEPCO (60.36%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1597	Reconductor the Oak Grove - Aquasco 230 kV '23062' circuit and upgrade terminal equipments at Oak Grove and Aquasco 230 kV substations		AEC (1.44%) / BGE (48.60%) / DPL (2.52%) / PECO (5.00%) / PEPCO (42.44%)
b2008	Reconductor feeder 23032 and 23034 to high temp. conductor (10 miles)		BGE (33.05%) / DPL (1.38%) / PECO (1.35%) / PEPCO (64.22%) /
b2136	Reconductor the Morgantown - V3-017 230 kV '23086' circuit and replace terminal equipments at Morgantown		PEPCO (100%)
b2137	Reconductor the Morgantown - Talbert 230 kV '23085' circuit and replace terminal equipment at Morgantown		PEPCO (100%)
b2138	Replace terminal equipments at Hawkins 230 kV substation		PEPCO (100%)

## SCHEDULE 12 – APPENDIX

### (12) Public Service Electric and Gas Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0025	Convert the Bergen-Leonia 138 Kv circuit to 230 kV circuit.		PSEG (100%)
b0090	Add 150 MVAR capacitor at Camden 230 kV		PSEG (100%)
b0121	Add 150 MVAR capacitor at Aldene 230 kV		PSEG (100%)
b0122	Bypass the Essex 138 kV series reactors		PSEG (100%)
b0125	Add Special Protection Scheme at Bridgewater to automatically open 230 kV breaker for outage of Branchburg – Deans 500 kV and Deans 500/230 kV #1 transformer		PSEG (100%)
b0126	Replace wavetrap on Branchburg – Flagtown 230 kV		PSEG (100%)
b0127	Replace terminal equipment to increase Brunswick – Adams – Bennetts Lane 230 kV to conductor rating		PSEG (100%)
b0129	Replace wavetrap on Flagtown – Somerville 230 kV		PSEG (100%)
b0130	Replace all derated Branchburg 500/230 kV transformers		AEC (1.36%) / ConEd (0.26%) / JCPL (47.63%) / PSEG (50.75%)
b0134	Upgrade or Retension PSEG portion of Kittatinny – Newton 230 kV circuit		JCPL (51.11%) / PSEG (45.96%) / RE (2.93%)

The Annual Revenue Requirement for all Public Service Electric and Gas Company Projects (Required Transmission Enhancements) in this Section 12 shall be as specified in Attachment 7 of Attachment H-10A and under the procedures detailed in Attachment H-10B.

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0145	Build new Essex – Aldene 230 kV cable connected through a phase angle regulator at Essex	PSEG (21.78%) / JCPL (73.45%) / RE (4.77%)
b0157	Add 100MVAR capacitor at West Orange 138kV substation	PSEG (100%)
b0158	Close the Sunnymeade "C" and "F" bus tie	PSEG (100%)
b0159	Make the Bayonne reactor permanent installation	PSEG (100%)
b0160	Relocate the X-2250 circuit from Hudson 1-6 bus to Hudson 7-12 bus	PSEG (100%)
b0161	Install 230/138kV transformer at Metuchen substation	PSEG (99.80%) / RE (0.20%)
b0162	Upgrade the Edison – Meadow Rd 138kV “Q” circuit	PSEG (100%)
b0163	Upgrade the Edison – Meadow Rd 138kV “R” circuit	PSEG (100%)
b0169	Build a new 230 kV section from Branchburg – Flagtown and move the Flagtown – Somerville 230 kV circuit to the new section	AEC (1.70%) / ConEd (1.06%) / JCPL (25.66%) / Neptune* (10.51%) / PSEG (58.96%) / ECP** (2.11%)
b0170	Reconductor the Flagtown-Somerville-Bridgewater 230 kV circuit with 1590 ACSS	JCLP (42.95%) / Neptune* (17.90%) / PSEG (38.36%) RE (0.79%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0172.2	Replace wave trap at Branchburg 500kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)</u></p>
b0184	Replace Hudson 230kV circuit breakers #1-2	PSEG (100%)
b0185	Replace Deans 230kV circuit breakers #9-10	PSEG (100%)
b0186	Replace Essex 230kV circuit breaker #5-6	PSEG (100%)
b1082	Install 230/138 kV transformer at Bergen substation	PENELEC (16.52%) / PSEG (80.29%) / RE (3.19%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0201	Branchburg substation: replace wave trap on Branchburg – Readington 230 kV circuit		PSEG (100%)
b0213.1	Replace New Freedom 230 kV breaker BS2-6		PSEG (100%)
b0213.3	Replace New Freedom 230 kV breaker BS2-8		PSEG (100%)
b0274	Replace both 230/138 kV transformers at Roseland		ConEd (8.48%) / PSEG (88.56%) / ECP** (2.96%)
b0275	Upgrade the two 138 kV circuits between Roseland and West Orange		PSEG (100%)
b0278	Install 228 MVAR capacitor at Roseland 230 kV substation		PSEG (100%)
b0290	Install 400 MVAR capacitor in the Branchburg 500 kV vicinity		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)</u>
b0358	Reconductor the PSEG portion of Buckingham – Pleasant Valley 230 kV, replace wave trap and metering transformer		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0368	Reconductor Tosco – G22_MTX 230 kV circuit with 1033 bundled ACSS	PSEG (100%)
b0371	Make the Metuchen 138 kV bus solid and upgrade 6 breakers at the Metuchen substation	PSEG (100%)
b0372	Make the Athenia 138 kV bus solid and upgrade 2 breakers at the Athenia substation	PSEG (100%)
b0395	Replace Hudson 230 kV breaker BS4-5	PSEG (100%)
b0396	Replace Hudson 230 kV breaker BS1-6	PSEG (100%)
b0397	Replace Hudson 230 kV breaker BS3-4	PSEG (100%)
b0398	Replace Hudson 230 kV breaker BS5-6	PSEG (100%)
b0401.1	Replace Roseland 230 kV breaker BS6-7	PSEG (100%)
b0401.2	Replace Roseland 138 kV breaker O-1315	PSEG (100%)
b0401.3	Replace Roseland 138 kV breaker S-1319	PSEG (100%)
b0401.4	Replace Roseland 138 kV breaker T-1320	PSEG (100%)
b0401.5	Replace Roseland 138 kV breaker G-1307	PSEG (100%)
b0401.6	Replace Roseland 138 kV breaker P-1316	PSEG (100%)
b0401.7	Replace Roseland 138 kV breaker 220-4	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0401.8	Replace W. Orange 138 kV breaker 132-4	PSEG (100%)
b0411	Install 4 <sup>th</sup> 500/230 kV transformer at New Freedom	AEC (47.01%) / JCPL (7.04%) / Neptune* (0.28%) / PECO (23.36%) / PSEG (22.31%)
b0423	Reconductor Readington (2555) – Branchburg (4962) 230 kV circuit w/1590 ACSS	PSEG (100%)
b0424	Replace Readington wavetrap on Readington (2555) – Roseland (5017) 230 kV circuit	PSEG (100%)
b0425	Reconductor Linden (4996) – Tosco (5190) 230 kV circuit w/1590 ACSS (Assumes operating at 220 degrees C)	PSEG (100%)
b0426	Reconductor Tosco (5190) – G22_MTX5 (90220) 230 kV circuit w/1590 ACSS (Assumes operation at 220 degrees C)	PSEG (100%)
b0427	Reconductor Athenia (4954) – Saddle Brook (5020) 230 kV circuit river section	PSEG (100%)
b0428	Replace Roseland wavetrap on Roseland (5019) – West Caldwell “G” (5089) 138 kV circuit	PSEG (100%)
b0429	Reconductor Kittatinny (2553) – Newton (2535) 230 kV circuit w/1590 ACSS	JCPL (41.91%) / Neptune* (3.59%) / PSEG (50.59%) / RE (2.23%) / ECP** (1.68%)
b0439	Spare Deans 500/230 kV transformer	PSEG (100%)
b0446.1	Upgrade Bayway 138 kV breaker #2-3	PSEG (100%)
b0446.2	Upgrade Bayway 138 kV breaker #3-4	PSEG (100%)



**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0446.3	Upgrade Bayway 138 kV breaker #6-7	PSEG (100%)
b0446.4	Upgrade the breaker associated with TX 132-5 on Linden 138 kV	PSEG (100%)
b0470	Install 138 kV breaker at Roseland and close the Roseland 138 kV buses	PSEG (100%)
b0471	Replace the wave traps at both Lawrence and Pleasant Valley on the Lawrence – Pleasant Vallen 230 kV circuit	PSEG (100%)
b0472	Increase the emergency rating of Saddle Brook – Athenia 230 kV by 25% by adding forced cooling	ConEd (1.64%) / ECP (2.03%) / PSEG (92.86%) / RE (3.47%)
b0473	Move the 150 MVAR mobile capacitor from Aldene 230 kV to Lawrence 230 kV substation	PSEG (100%)
b0489	Build new 500 kV transmission facilities from Pennsylvania – New Jersey border at Bushkill to Roseland	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)†
		<b><u>DFAX Allocation:</u></b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)
b489.1	Replace Athenia 230 kV breaker 31H	PSEG (100%)

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† Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

†† Cost allocations associated with below 500 kV elements of the project

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b489.2	Replace Bergen 230 kV breaker 10H		PSEG (100%)
b489.3	Replace Saddlebrook 230 kV breaker 21P		PSEG (100%)
b0489.4	Install two Roseland 500/230 kV transformers as part of the Susquehanna – Roseland 500 kV project		AEC (5.07%) / ComEd (0.29%) / ConEd (0.48%) / Dayton (0.03%) / DPL (1.75%) / JCPL (32.57%) / Neptune* (6.29%) / PECO (9.99%) / PENELEC (0.56%) / ECP** (0.95%) / PSEG (40.51%) / RE (1.51%) ††
b0489.5	Replace Roseland 230 kV breaker '42H' with 80 kA		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u></p>
			<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u></p>
b0489.6	Replace Roseland 230 kV breaker '51H' with 80 kA		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u></p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.7	Replace Roseland 230 kV breaker '71H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u></p>
b0489.8	Replace Roseland 230 kV breaker '31H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u></p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.9	Replace Roseland 230 kV breaker '11H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</p>
b0489.10	Replace Roseland 230 kV breaker '21H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.11	Replace Roseland 230 kV breaker '32H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u></p>
b0489.12	Replace Roseland 230 kV breaker '12H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u></p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.13	Replace Roseland 230 kV breaker '52H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd  (13.35%) / ConEd (0.57%) /  Dayton (2.11%) / DEOK  (3.35%) / DL (1.76%) / DPL  (2.60%) / Dominion (12.32%) /  EKPC (1.82%) / HTP***  (0.20%) / JCPL (3.76%) / ME  (1.86%) / NEPTUNE* (0.42%)  / PECO (5.27%) / PENELEC  (1.84%) / PEPCO (4.15%) /  PPL (4.43%) / PSEG (6.18%) /  RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) /</u>  <u>JCPL (35.20%) / NEPTUNE</u>  <u>(3.38%) / PSEG (52.66%) / RE</u>  <u>(2.11%)</u></p>
b0489.14	Replace Roseland 230 kV breaker '41H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd  (13.35%) / ConEd (0.57%) /  Dayton (2.11%) / DEOK  (3.35%) / DL (1.76%) / DPL  (2.60%) / Dominion (12.32%) /  EKPC (1.82%) / HTP***  (0.20%) / JCPL (3.76%) / ME  (1.86%) / NEPTUNE* (0.42%)  / PECO (5.27%) / PENELEC  (1.84%) / PEPCO (4.15%) /  PPL (4.43%) / PSEG (6.18%) /  RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) /</u>  <u>JCPL (35.20%) / NEPTUNE</u>  <u>(3.38%) / PSEG (52.66%) / RE</u>  <u>(2.11%)</u></p>

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.15	Replace Roseland 230 kV breaker '72H'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)  <b><u>DFAX Allocation:</u></b> <u>ECP (2.86%) / HTP (3.79%) /</u> <u>JCPL (35.20%) / NEPTUNE</u> <u>(3.38%) / PSEG (52.66%) / RE</u> <u>(2.11%)</u>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0498	Loop the 5021 circuit into New Freedom 500 kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (15.37%) / ECP (1.25%) / HTP (1.05%) / JCPL (28.13%) / NEPTUNE (3.27%) / PSEG (48.97%) / RE (1.96%)</u></p>
b0498.1	Upgrade the 20H circuit breaker	PSEG (100%)
b0498.2	Upgrade the 22H circuit breaker	PSEG (100%)
b0498.3	Upgrade the 30H circuit breaker	PSEG (100%)
b0498.4	Upgrade the 32H circuit breaker	PSEG (100%)
b0498.5	Upgrade the 40H circuit breaker	PSEG (100%)
b0498.6	Upgrade the 42H circuit breaker	PSEG (100%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0565	Install 100 MVAR capacitor at Cox's Corner 230 kV substation		PSEG (100%)
b0578	Replace Essex 138 kV breaker 4LM (C1355 line to ECRRF)		PSEG (100%)
b0579	Replace Essex 138 kV breaker 1LM (220-1 TX)		PSEG (100%)
b0580	Replace Essex 138 kV breaker 1BM (BS1-3 tie)		PSEG (100%)
b0581	Replace Essex 138 kV breaker 2BM (BS3-4 tie)		PSEG (100%)
b0582	Replace Linden 138 kV breaker 3 (132-7 TX)		PSEG (100%)
b0592	Replace Metuchen 138 kV breaker '2-2 Transfer'		PSEG (100%)
b0664	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0665	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0668	Reconductor with 2x1033 ACSS conductor		JCPL (39.41%) / NEPTUNE* (20.38%) / PSEG (38.76%) / RE (1.45%)
b0671	Replace terminal equipment at both ends of line		PSEG (100%)
b0743	Add a bus tie breaker at Roseland 138 kV		PSEG (100%)
b0812	Increase operating temperature on line for one year to get 925E MVA rating		PSEG (100%)
b0813	Reconductor Hudson – South Waterfront 230 kV circuit		BGE (1.25%) / JCPL (9.92%) / NEPTUNE* (0.87%) / PEPSCO (1.11%) / PSEG (83.73%) / RE (3.12%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814	New Essex – Kearney 138 kV circuit and Kearney 138 kV bus tie	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.1	Replace Kearny 138 kV breaker '1-SHT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.2	Replace Kearny 138 kV breaker '15HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.3	Replace Kearny 138 kV breaker '14HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.4	Replace Kearny 138 kV breaker '10HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.5	Replace Kearny 138 kV breaker '2HT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.6	Replace Kearny 138 kV breaker '22HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.7	Replace Kearny 138 kV breaker '4HT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.8	Replace Kearny 138 kV breaker '25HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0814.9	Replace Essex 138 kV breaker '2LM' with 63 kA breaker and 2.5 cycle contact parting time		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.10	Replace Essex 138 kV breaker '1BT' with 63 kA breaker and 2.5 cycle contact parting time		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.11	Replace Essex 138 kV breaker '2PM' with 63 kA breaker and 2.5 cycle contact parting time		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.12	Replace Marion 138 kV breaker '2HM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.13	Replace Marion 138 kV breaker '2LM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.14	Replace Marion 138 kV breaker '1LM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.15	Replace Marion 138 kV breaker '6PM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.16	Replace Marion 138 kV breaker '3PM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.17	Replace Marion 138 kV breaker '4LM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.18	Replace Marion 138 kV breaker '3LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.19	Replace Marion 138 kV breaker '1HM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.20	Replace Marion 138 kV breaker '2PM3' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.21	Replace Marion 138 kV breaker '2PM1' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.22	Replace ECRR 138 kV breaker '903'	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.23	Replace Foundry 138 kV breaker '21P'	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.24	Change the contact parting time on Essex 138 kV breaker '3LM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.25	Change the contact parting time on Essex 138 kV breaker '2BM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0814.26	Change the contact parting time on Essex 138 kV breaker '1BM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.27	Change the contact parting time on Essex 138 kV breaker '3PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.28	Change the contact parting time on Essex 138 kV breaker '4LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.29	Change the contact parting time on Essex 138 kV breaker '1PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.30	Change the contact parting time on Essex 138 kV breaker '1LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0829	Build Branchburg to Roseland 500 kV circuit as part of Branchburg – Hudson 500 kV project	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0829.6	Replace Branchburg 500 kV breaker 91X	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>PSEG (96.14%) / RE (3.86%)</u>
b0829.9	Replace Branchburg 230 kV breaker 102H	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0829.11	Replace Branchburg 230 kV breaker 32H		PSEG (100%)
b0829.12	Replace Branchburg 230 kV breaker 52H		PSEG (100%)
b0830	Build Roseland - Hudson 500 kV circuit as part of Branchburg – Hudson 500 kV project		AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0830.1	Replace Roseland 230 kV breaker '82H' with 80 kA		PSEG (100%)
b0830.2	Replace Roseland 230 kV breaker '91H' with 80 kA		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0830.3	Replace Roseland 230 kV breaker '22H' with 80 kA		PSEG (100%)
b0831	Replace 138/13 kV transformers with 230/13 kV units as part of Branchburg – Hudson 500 kV project		ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0832	Build Hudson 500 kV switching station as part of Branchburg – Hudson 500 kV project		AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0833	Build Roseland 500 kV switching station as part of Branchburg – Hudson 500 kV project		AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0834	Convert the E-1305/F-1306 to one 230 kV circuit as part of Branchburg – Hudson 500 kV project		ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0835	Build Hudson 230 kV transmission lines as part of Roseland – Hudson 500 kV project as part of Branchburg – Hudson 500 kV project		ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0836	Install transformation at new Hudson 500 kV switching station and perform Hudson 230 kV and 345 kV station work as part of Branchburg – Hudson 500 kV project		ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0882	Replace Hudson 230 kV breaker 1HA with 80 kA		PSEG (100%)
b0883	Replace Hudson 230 kV breaker 2HA with 80 kA		PSEG (100%)
b0884	Replace Hudson 230 kV breaker 3HB with 80 kA		PSEG (100%)
b0885	Replace Hudson 230 kV breaker 4HA with 80 kA		PSEG (100%)
b0886	Replace Hudson 230 kV breaker 4HB with 80 kA		PSEG (100%)
b0889	Replace Bergen 230 kV breaker '21H'		PSEG (100%)
b0890	Upgrade New Freedom 230 kV breaker '21H'		PSEG (100%)
b0891	Upgrade New Freedom 230 kV breaker '31H'		PSEG (100%)
b0899	Replace ECRR 138 kV breaker 901		PSEG (100%)
b0900	Replace ECRR 138 kV breaker 902		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1013	Replace Linden 138 kV breaker '7PB'		PSEG (100%)
b1017	Reconductor South Mahwah - Waldwick 345 kV J-3410 circuit		ConEd (49.36%) / JCPL (14.69%) / NEPTUNE* (1.39%) / PSEG (32.84%) / RE (1.28%) / ECP** (0.44%)
b1018	Reconductor South Mahwah - Waldwick 345 kV K-3411 circuit		ConEd (49.38%) / JCPL (14.77%) / NEPTUNE* (1.39%) / PSEG (32.74%) / RE (1.28%) / ECP** (0.44%)
b1019.1	Replace wave trap, line disconnect and ground switch at Roseland on the F-2206 circuit		PSEG (100%)
b1019.2	Replace wave trap, line disconnect and ground switch at Roseland on the B-2258 circuit		PSEG (100%)
b1019.3	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.4	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the B-2258 circuit		PSEG (100%)
b1019.5	Replace wave trap, line disconnect and ground switch at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.6	Replace line disconnect and ground switch at Cedar Grove on the K-2263 circuit		PSEG (100%)
b1019.7	Replace 2-4 and 4-5 section disconnect and ground switches at Clifton on the B-2258 circuit		PSEG (100%)
b1019.8	Replace 1-2 and 2-3 section disconnect and ground switches at Clifton on the K-2263 circuit		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1019.9	Replace line, ground, 230 kV main bus disconnects at Athenia on the B-2258 circuit		PSEG (100%)
b1019.10	Replace wave trap, line, ground 230 kV breaker disconnect and 230 kV main bus disconnects at Athenia on the K-2263 circuit		PSEG (100%)
b1082.1	Replace Bergen 138 kV breaker '30P' with 80 kA		PSEG (100%)
b1082.2	Replace Bergen 138 kV breaker '80P' with 80 kA		PSEG (100%)
b1082.3	Replace Bergen 138 kV breaker '70P' with 80 kA		PSEG (100%)
b1082.4	Replace Bergen 138 kV breaker '90P' with 63 kA		PSEG (100%)
b1082.5	Replace Bergen 138 kV breaker '50P' with 63 kA		PSEG (100%)
b1082.6	Replace Bergen 230 kV breaker '12H' with 80 kA		PSEG (100%)
b1082.7	Replace Bergen 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1082.8	Replace Bergen 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1082.9	Replace Bergen 230 kV breaker '20H' with 80 kA		PSEG (100%)
b1098	Re-configure the Bayway 138 kV substation and install three new 138 kV breakers		PSEG (100%)
b1099	Build a new 230 kV substation by tapping the Aldene – Essex circuit and install three 230/26 kV transformers, and serve some of the Newark area load from the new station		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1100	Build a new 138 kV circuit from Bayonne to Marion		PSEG (100%)
b1101	Re-configure the Cedar Grove substation with breaker and half scheme and build a new 69 kV circuit from Cedar Grove to Hinchman		PSEG (100%)
b1154	Convert the West Orange 138 kV substation, the two Roseland – West Orange 138 kV circuits, and the Roseland – Sewaren 138 kV circuit from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1155	Build a new 230 kV circuit from Branchburg to Middlesex Sw. Rack. Build a new 230 kV substation at Middlesex		JCPL (4.61%) / PSEG (91.75%) / RE (3.64%)
b1155.3	Replace Branchburg 230 kV breaker '81H' with 63 kA		PSEG (100%)
b1155.4	Replace Branchburg 230 kV breaker '72H' with 63 kA		PSEG (100%)
b1155.5	Replace Branchburg 230 kV breaker '61H' with 63 kA		PSEG (100%)
b1155.6	Replace Branchburg 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156	Convert the Burlington, Camden, and Cuthbert Blvd 138 kV substations, the 138 kV circuits from Burlington to Camden, and the 138 kV circuit from Camden to Cuthbert Blvd. from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1156.13	Replace Camden 230 kV breaker '22H' with 80 kA		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1156.14	Replace Camden 230 kV breaker '32H' with 80 kA		PSEG (100%)
b1156.15	Replace Camden 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1156.16	Replace New Freedom 230 kV breaker '50H' with 63 kA		PSEG (100%)
b1156.17	Replace New Freedom 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156.18	Replace New Freedom 230 kV breaker '51H' with 63 kA		PSEG (100%)
b1156.19	Rebuild Camden 230 kV to 80 kA		PSEG (100%)
b1156.20	Rebuild Burlington 230 kV to 80 kA		PSEG (100%)
b1197.1	Reconductor the PSEG portion of the Burlington – Croydon circuit with 1590 ACSS		PSEG (100%)
b1228	Re-configure the Lawrence 230 kV substation to breaker and half		HTP (0.14%) / ECP (0.22%) / PSEG (95.83%) / RE (3.81%)
b1255	Build a new 69 kV substation (Ridge Road) and build new 69 kV circuits from Montgomery – Ridge Road – Penns Neck/Dow Jones		PSEG (96.18%) / RE (3.82%)
b1304.1	Convert the existing 'D1304' and 'G1307' 138 kV circuits between Roseland – Kearny – Hudson to 230 kV operation		AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1304.2	Expand existing Bergen 230 kV substation and reconfigure the Athenia 230 kV substation to breaker and a half scheme	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.3	Build second 230 kV underground cable from Bergen to Athenia	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.4	Build second 230 kV underground cable from Hudson to South Waterfront	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.5	Replace Athenia 230 kV breaker '21H' with 80 kA	PSEG (100%)
b1304.6	Replace Athenia 230 kV breaker '41H' with 80 kA	PSEG (100%)
b1304.7	Replace South Waterfront 230 kV breaker '12H' with 80 kA	PSEG (100%)
b1304.8	Replace South Waterfront 230 kV breaker '22H' with 80 kA	PSEG (100%)
b1304.9	Replace South Waterfront 230 kV breaker '32H' with 80 kA	PSEG (100%)
b1304.10	Replace South Waterfront 230 kV breaker '52H' with 80 kA	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.11	Replace South Waterfront 230 kV breaker '62H' with 80 kA		PSEG (100%)
b1304.12	Replace South Waterfront 230 kV breaker '72H' with 80 kA		PSEG (100%)
b1304.13	Replace South Waterfront 230 kV breaker '82H' with 80 kA		PSEG (100%)
b1304.14	Replace Essex 230 kV breaker '20H' with 80 kA		PSEG (100%)
b1304.15	Replace Essex 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.16	Replace Essex 230 kV breaker '10H' with 80 kA		PSEG (100%)
b1304.17	Replace Essex 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1304.18	Replace Essex 230 kV breaker '11HL' with 80 kA		PSEG (100%)
b1304.19	Replace Newport R 230 kV breaker '23H' with 63 kA		PSEG (100%)
b1304.20	Rebuild Athenia 230 kV substation to 80 kA		PSEG (100%)
b1304.21	Rebuild Bergen 230 kV substation to 80 kA		PSEG (100%)
b1398	Build two new parallel underground circuits from Gloucester to Camden		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.1	Install shunt reactor at Gloucester to offset cable charging		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.2	Reconfigure the Cuthbert station to breaker and a half scheme	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.3	Build a second 230 kV parallel overhead circuit from Mickelton – Gloucester	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.4	Reconductor the existing Mickleton – Gloucester 230 kV circuit (PSEG portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.7	Reconductor the Camden – Richmond 230 kV circuit (PSEG portion) and upgrade terminal equipments at Camden substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.15	Replace Gloucester 230 kV breaker '21H' with 63 kA	PSEG (100%)
b1398.16	Replace Gloucester 230 kV breaker '51H' with 63 kA	PSEG (100%)
b1398.17	Replace Gloucester 230 kV breaker '56H' with 63 kA	PSEG (100%)
b1398.18	Replace Gloucester 230 kV breaker '26H' with 63 kA	PSEG (100%)
b1398.19	Replace Gloucester 230 kV breaker '71H' with 63 kA	PSEG (100%)
b1399	Convert the 138 kV path from Aldene – Springfield Rd. – West Orange to 230 kV	PSEG (96.18%) / RE (3.82%)
b1400	Install 230 kV circuit breakers at Bennetts Ln. “F” and “X” buses	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1410	Replace Salem 500 kV breaker '11X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>
b1411	Replace Salem 500 kV breaker '12X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>
b1412	Replace Salem 500 kV breaker '20X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>

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\*\*East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1413	Replace Salem 500 kV breaker '21X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPSCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>
b1414	Replace Salem 500 kV breaker '31X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPSCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>
b1415	Replace Salem 500 kV breaker '32X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPSCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1539	Replace Tosco 230 kV breaker 'CB1' with 63 kA		PSEG (100%)
b1540	Replace Tosco 230 kV breaker 'CB2' with 63 kA		PSEG (100%)
b1541	Open the Hudson 230 kV bus tie		PSEG (100%)
b1588	Reconductor the Eagle Point - Gloucester 230 kV circuit #1 and #2 with higher conductor rating		JCPL (10.31%) / Neptune* (0.98%) / HTP (0.75%) / PECO (30.81%) / ECP** (0.82%) / PSEG (54.17%) / RE (2.16%)
b1589	Re-configure the Kearny 230 kV substation and loop the P-2216-1 (Essex - NJT Meadows) 230 kV circuit		ATSI (8.00%) / HTP (20.18%) / PENELEC (7.77%) / PSEG (61.59%) / RE (2.46%)
b1590	Upgrade the PSEG portion of the Camden Richmond 230 kV circuit to six wire conductor and replace terminal equipment at Camden		BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPCO (1.93%) / PPL (2.46%) / ECP** (0.16%)
b1749	Advance n1237 (Replace Essex 230 kV breaker '22H' with 80kA)		PSEG (100%)
b1750	Advance n0666.5 (Replace Hudson 230 kV breaker '1HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1751	Advance n0666.3 (Replace Hudson 230 kV breaker '2HA' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1752	Advance n0666.10 (Replace Hudson 230 kV breaker '2HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1753	Marion 138 kV breaker '7PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1754	Marion 138 kV breaker '3PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1755	Marion 138 kV breaker '6PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1787	Build a second 230 kV circuit from Cox's Corner - Lumberton	AEC (4.96%) / JCPL (44.20%) / NEPTUNE* (0.53%) / HTP (0.15%) / ECP** (0.16%) / PSEG (48.08%) / RE (1.92%)
b2034	Install a reactor along the Kearny - Essex 138 kV line	PSEG (100%)
b2035	Replace Sewaren 138 kV breaker '11P'	PSEG (100%)
b2036	Replace Sewaren 138 kV breaker '21P'	PSEG (100%)
b2037	Replace PVSC 138 kV breaker '452'	PSEG (100%)
b2038	Replace PVSC 138 kV breaker '552'	PSEG (100%)
b2039	Replace Bayonne 138 kV breaker '11P'	PSEG (100%)
b2139	Reconductor the Mickleton - Gloucester 230 kV parallel circuits with double bundle conductor	PSEG (61.11%) / PECO (36.45%) / RE (2.44%)
b2146	Re-configure the Brunswick 230 kV and 69 kV substations	PSEG (96.16%) / RE (3.84%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b2151	Construct Jackson Rd. 69 kV substation and loop the Cedar Grove - Hinchmans Ave into Jackson Rd. and construct Hawthorne 69 kV substation and build 69 kV circuit from Hinchmans Ave - Hawthorne - Fair Lawn		PSEG (100%)
b2159	Reconfigure the Linden, Bayway, North Ave, and Passaic Valley S.C. 138 kV substations. Construct and loop new 138 kV circuit to new airport station		PSEG (72.61%) / HTP (24.49%) / RE (2.90%)

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## SCHEDULE 12 – APPENDIX

### (14) Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0216	Install -100/+525 MVAR dynamic reactive device at Black Oak	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (48.02%) / BGE (8.00%) / Dominion (28.85%) / PEPCO (15.13%)</u></p>
b0218	Install third Wylie Ridge 500/345kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0220	Upgrade coolers on Wylie Ridge 500/345 kV #7	AEC (11.62%) / ConEd (1.79%) / DPL (19.05%) / Dominion (13.56%) / JCPL (15.28%) / PECO (38.70%)
b0229	Install fourth Bedington 500/138 kV	AEC (11.62%) / ConEd (1.79%) / DPL (19.05%) / Dominion (13.56%) / JCPL (15.28%) / PECO (38.70%)
b0230	Install fourth Meadowbrook 500/138 kV	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		APS (79.16%) / BGE (3.61%) / DPL (0.86%) / Dominion (11.75%) / ME (0.67%) / PEPCO (3.95%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0238	Reconductor Doubs – Dickerson and Doubs – Aqueduct 1200 MVA	As specified under the procedures detailed in Attachment H-18B, Section 1.b	BGE (16.66%) / Dominion (33.66%) / PEPCO (49.68%)
b0240	Open the Black Oak #3 500/138 kV transformer for the loss of Hatfield – Back Oak 500 kV line		APS (100%)
b0245	Replacement of the existing 954 ACSR conductor on the Bedington – Nipetown 138 kV line with high temperature/low sag conductor		APS (100%)
b0246	Rebuild of the Double Tollgate – Old Chapel 138 kV line with 954 ACSR conductor	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)
b0273	Open both North Shenandoah #3 transformer and Strasburg – Edinburgh 138 kV line for the loss of Mount Storm – Meadowbrook 572 500 kV		APS (100%)
b0322	Convert Lime Kiln substation to 230 kV operation		APS (100%)
b0323	Replace the North Shenandoah 138/115 kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)

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†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.2	Build new Meadow Brook – Loudoun 500 kV circuit (20 of 50 miles)	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0343	Replace Doubs 500/230 kV transformer #2	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0344	Replace Doubs 500/230 kV transformer #3	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0345	Replace Doubs 500/230 kV transformer #4	As specified under the procedures detailed in Attachment H-18B, Section 1.b

**Load-Ratio Share Allocation:**  
AEC (1.69%) / AEP (14.17%) /  
APS (5.50%) / ATSI (8.04%) /  
BGE (4.16%) / ComEd (13.35%)  
/ ConEd (0.57%) / Dayton  
(2.11%) / DEOK (3.35%) / DL  
(1.76%) / DPL (2.60%) /  
Dominion (12.32%) / EKPC  
(1.82%) / HTP\*\*\* (0.20%) /  
JCPL (3.76%) / ME (1.86%) /  
NEPTUNE\* (0.42%) / PECO  
(5.27%) / PENELEC (1.84%) /  
PEPCO (4.15%) / PPL (4.43%) /  
PSEG (6.18%) / RE (0.25%) /  
ECP\*\* (0.20%)

**DFAX Allocation:**  
Dominion (88.62%) / PEPCO  
(11.38%)

AEC (1.85%) / BGE (21.49%) /  
DPL (3.91%) / Dominion  
(28.86%) / ME (2.97%) / PECO  
(5.73%) / PEPCO (35.19%)

AEC (1.86%) / BGE (21.50%) /  
DPL (3.91%) / Dominion  
(28.82%) / ME (2.97%) / PECO  
(5.74%) / PEPCO (35.20%)

AEC (1.85%) / BGE (21.49%) /  
DPL (3.90%) / Dominion  
(28.83%) / ME (2.98%) / PECO  
(5.75%) / PEPCO (35.20%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.1	Build new Mt. Storm – 502 Junction 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>
b0347.2	Build new Mt. Storm – Meadow Brook 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u></p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.3	Build new 502 Junction 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.4	Upgrade Meadow Brook 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b

**Load-Ratio Share Allocation:**  
AEC (1.69%) / AEP (14.17%) /  
APS (5.50%) / ATSI (8.04%) /  
BGE (4.16%) / ComEd (13.35%)  
/ ConEd (0.57%) / Dayton  
(2.11%) / DEOK (3.35%) / DL  
(1.76%) / DPL (2.60%) /  
Dominion (12.32%) / EKPC  
(1.82%) / HTP\*\*\* (0.20%) /  
JCPL (3.76%) / ME (1.86%) /  
NEPTUNE\* (0.42%) / PECO  
(5.27%) / PENELEC (1.84%) /  
PEPCO (4.15%) / PPL (4.43%) /  
PSEG (6.18%) / RE (0.25%) /  
ECP\*\* (0.20%)

**DFAX Allocation:**  
APS (62.13%) / PEPCO (37.87%)

**Load-Ratio Share Allocation:**  
AEC (1.69%) / AEP (14.17%) /  
APS (5.50%) / ATSI (8.04%) /  
BGE (4.16%) / ComEd (13.35%)  
/ ConEd (0.57%) / Dayton  
(2.11%) / DEOK (3.35%) / DL  
(1.76%) / DPL (2.60%) /  
Dominion (12.32%) / EKPC  
(1.82%) / HTP\*\*\* (0.20%) /  
JCPL (3.76%) / ME (1.86%) /  
NEPTUNE\* (0.42%) / PECO  
(5.27%) / PENELEC (1.84%) /  
PEPCO (4.15%) / PPL (4.43%) /  
PSEG (6.18%) / RE (0.25%) /  
ECP\*\* (0.20%)

**DFAX Allocation:**  
APS (36.43%) / Dominion (49.99%)  
/ PEPCO (13.58%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.5	Replace Harrison 500 kV breaker HL-3	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%)  / ConEd (0.57%) / Dayton  (2.11%) / DEOK (3.35%) / DL  (1.76%) / DPL (2.60%) /  Dominion (12.32%) / EKPC  (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p>
		<p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>
b0347.6	Upgrade (per ABB inspection) breaker HL-6	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%)  / ConEd (0.57%) / Dayton  (2.11%) / DEOK (3.35%) / DL  (1.76%) / DPL (2.60%) /  Dominion (12.32%) / EKPC  (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p>
		<p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.7	Upgrade (per ABB inspection) breaker HL-7	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>
b0347.8	Upgrade (per ABB inspection) breaker HL-8	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.9	Upgrade (per ABB inspection) breaker HL-10	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>
b0347.10	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-1	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.11	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-3	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>
b0347.12	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-4	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>

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\*\*East Coast Power, L.L.C

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.13	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-6	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>
b0347.14	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-7	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.15	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-9	<b><u>Load-Ratio Share Allocation:</u></b> (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>
b0347.16	Upgrade (per ABB inspection) Harrison 500 kV breaker 'HL-3'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.17	Replace Meadow Brook 138 kV breaker 'MD-10'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p>
		<p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%)</u>  <u>/ PEPCO (13.58%)</u></p>
b0347.18	Replace Meadow Brook 138 kV breaker 'MD-11'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p>
		<p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%)</u>  <u>/ PEPCO (13.58%)</u></p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.19	Replace Meadow Brook 138 kV breaker 'MD-12'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%)</u> <u>/ PEPCO (13.58%)</u>
b0347.20	Replace Meadow Brook 138 kV breaker 'MD-13'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%)</u> <u>/ PEPCO (13.58%)</u>

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\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.21	Replace Meadow Brook 138 kV breaker 'MD-14'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%)</u> <u>/ PEPCO (13.58%)</u>
b0347.22	Replace Meadow Brook 138 kV breaker 'MD-15'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%)</u> <u>/ PEPCO (13.58%)</u>

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\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.23	Replace Meadow Brook 138 kV breaker 'MD-16'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%)</u> <u>/ PEPCO (13.58%)</u>
b0347.24	Replace Meadow Brook 138 kV breaker 'MD-17'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%)</u> <u>/ PEPCO (13.58%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.25	Replace Meadow Brook 138 kV breaker 'MD-18'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%)</u> <u>/ PEPCO (13.58%)</u>
b0347.26	Replace Meadow Brook 138 kV breaker 'MD-22#1 CAP'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%)</u> <u>/ PEPCO (13.58%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.27	Replace Meadow Brook 138 kV breaker 'MD-4'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>
b0347.28	Replace Meadow Brook 138 kV breaker 'MD-5'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>

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\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

**Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)**

b0347.29	Replace Meadowbrook 138 kV breaker 'MD-6'		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u></p>
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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.30	Replace Meadowbrook 138 kV breaker 'MD-7'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%)  / ConEd (0.57%) / Dayton  (2.11%) / DEOK (3.35%) / DL  (1.76%) / DPL (2.60%) /  Dominion (12.32%) / EKPC  (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%)</u>  <u>/ PEPCO (13.58%)</u></p>
b0347.31	Replace Meadowbrook 138 kV breaker 'MD-8'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%)  / ConEd (0.57%) / Dayton  (2.11%) / DEOK (3.35%) / DL  (1.76%) / DPL (2.60%) /  Dominion (12.32%) / EKPC  (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%)</u>  <u>/ PEPCO (13.58%)</u></p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.32	Replace Meadowbrook 138 kV breaker 'MD-9'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion  (12.32%) / EKPC (1.82%) /  HTP*** (0.20%) / JCPL (3.76%) /  ME (1.86%) / NEPTUNE*  (0.42%) / PECO (5.27%) /  PENELEC (1.84%) / PEPCO  (4.15%) / PPL (4.43%) / PSEG  (6.18%) / RE (0.25%) / ECP**  (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%) /</u>  <u>PEPCO (13.58%)</u></p>
b0347.33	Replace Meadow Brook 138kV breaker 'MD-1'	APS (100%)
b0347.34	Replace Meadow Brook 138kV breaker 'MD-2'	APS (100%)
b0348	Upgrade Stonewall – Inwood 138 kV with 954 ACSR conductor	APS (100%)
b0373	Convert Doubs – Monocacy 138 kV facilities to 230 kV operation	AEC (1.82%) / APS (76.84%) / DPL (2.64%) / JCPL (4.53%) / ME (9.15%) / Neptune* (0.42%) / PPL (4.60%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

**Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)**

b0393	Replace terminal equipment at Harrison 500 kV and Belmont 500 kV		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ATSI (33.81%) / Dayton (14.78%) /</u>  <u>DEOK (44.45%) / EKPC (6.96%)</u></p>
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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0406.1	Replace Mitchell 138 kV breaker “#4 bank”		APS (100%)
b0406.2	Replace Mitchell 138 kV breaker “#5 bank”		APS (100%)
b0406.3	Replace Mitchell 138 kV breaker “#2 transf”		APS (100%)
b0406.4	Replace Mitchell 138 kV breaker “#3 bank”		APS (100%)
b0406.5	Replace Mitchell 138 kV breaker “Charlerio #2”		APS (100%)
b0406.6	Replace Mitchell 138 kV breaker “Charlerio #1”		APS (100%)
b0406.7	Replace Mitchell 138 kV breaker “Shepler Hill Jct”		APS (100%)
b0406.8	Replace Mitchell 138 kV breaker “Union Jct”		APS (100%)
b0406.9	Replace Mitchell 138 kV breaker “#1-2 138 kV bus tie”		APS (100%)
b0407.1	Replace Marlowe 138 kV breaker “#1 transf”		APS (100%)
b0407.2	Replace Marlowe 138 kV breaker “MBO”		APS (100%)
b0407.3	Replace Marlowe 138 kV breaker “BMA”		APS (100%)
b0407.4	Replace Marlowe 138 kV breaker “BMR”		APS (100%)
b0407.5	Replace Marlowe 138 kV breaker “WC-1”		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0407.6	Replace Marlowe 138 kV breaker “R11”	APS (100%)
b0407.7	Replace Marlowe 138 kV breaker “W”	APS (100%)
b0407.8	Replace Marlowe 138 kV breaker “138 kV bus tie”	APS (100%)
b0408.1	Replace Trissler 138 kV breaker “Belmont 604”	APS (100%)
b0408.2	Replace Trissler 138 kV breaker “Edgelawn 90”	APS (100%)
b0409.1	Replace Weirton 138 kV breaker “Wylie Ridge 210”	APS (100%)
b0409.2	Replace Weirton 138 kV breaker “Wylie Ridge 216”	APS (100%)
b0410	Replace Glen Falls 138 kV breaker “McAlpin 30”	APS (100%)
b0417	Reconductor Mitchell – Shepler Hill Junction 138kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0418	Install a breaker failure auto-restoration scheme at Cabot 500 kV for the failure of the #6 breaker	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0419	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p>
		<p><b><u>DFAX Allocation:</u></b>  <u>APS (100%)</u></p>
b0420	Operating Procedure to open the Black Oak 500/138 kV transformer #3 for the loss of Hatfield – Ronco 500 kV and the Hatfield #3 Generation	APS (100%)
b0445	Upgrade substation equipment and reconductor the Tidd – Mahans Lane – Weirton 138kV circuit with 954 ACSR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0460	Raise limiting structures on Albright – Bethelboro 138 kV to raise the rating to 175 MVA normal 214 MVA emergency		APS (100%)
b0491	Construct an Amos to Welton Spring to WV state line 765 kV circuit (APS equipment)	As specified under the procedures detailed in Attachment H-19B	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492	Construct a Welton Spring to Kemptown 765 kV line (APS equipment)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0492.3	Replace Eastalco 230 kV breaker D-26	APS (100%)
b0492.4	Replace Eastalco 230 kV breaker D-28	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.5	Replace Eastalco 230 kV breaker D-31	APS (100%)
b0495	Replace existing Kammer 765/500 kV transformer with a new larger transformer	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (0.73%) / BGE (43.42%) / Dayton (0.67%) / DEOK (1.42%) / EKPC (0.22%) / PEPCO (53.54%)</u></p>
b0533	Reconductor the Powell Mountain – Sutton 138 kV line	APS (100%)
b0534	Install a 28.61 MVAR capacitor on Sutton 138 kV	APS (100%)
b0535	Install a 44 MVAR capacitor on Dutch Fork 138 kV	APS (100%)
b0536	Replace Doubs circuit breaker DJ1	APS (100%)
b0537	Replace Doubs circuit breaker DJ7	APS (100%)
b0538	Replace Doubs circuit breaker DJ10	APS (100%)
b0572.1	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0572.2	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)
b0573	Reconfigure circuits in Butler – Cabot 138 kV area	APS (100%)
b0577	Replace Fort Martin 500 kV breaker FL-1	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (100%)</u>
b0584	Install 33 MVAR 138 kV capacitor at Necessity 138 kV	APS (100%)
b0585	Increase Cecil 138 kV capacitor size to 44 MVAR, replace five 138 kV breakers at Cecil due to increased short circuit fault duty as a result of the addition of the Prexy substation	APS (100%)
b0586	Increase Whiteley 138 kV capacitor size to 44 MVAR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0587	Reconductor AP portion of Tidd – Carnegie 138 kV and Carnegie – Weirton 138 kV with 954 ACSR	APS (100%)
b0588	Install a 40.8 MVAR 138 kV capacitor at Grassy Falls	APS (100%)
b0589	Replace five 138 kV breakers at Cecil	APS (100%)
b0590	Replace #1 and #2 breakers at Charleroi 138 kV	APS (100%)
b0591	Install a 25.2 MVAR capacitor at Seneca Caverns 138 kV	APS (100%)
b0673	Rebuild Elko – Carbon Center Junction using 230 kV construction	APS (100%)
b0674	Construct new Osage – Whiteley 138 kV circuit	APS (97.68%) / DL (0.96%) / PENELEC (1.09%) / ECP** (0.01%) / PSEG (0.25%) / RE (0.01%)
b0674.1	Replace the Osage 138 kV breaker ‘CollinsF126’	APS (100%)
b0675.1	Convert Monocacy - Walkersville 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.2	Convert Walkersville - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.3	Convert Ringgold - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.4	Convert Catoctin - Carroll 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.5	Convert portion of Ringgold Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.6	Convert Catoctin Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.7	Convert portion of Carroll Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.8	Convert Monocacy Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.9	Convert Walkersville Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0676.1	Reconductor Doubs - Lime Kiln (#207) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0676.2	Reconductor Doubs - Lime Kiln (#231) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0677	Reconductor Double Toll Gate – Riverton with 954 ACSR	APS (100%)
b0678	Reconductor Glen Falls - Oak Mound 138kV with 954 ACSR	APS (100%)
b0679	Reconductor Grand Point – Letterkenny with 954 ACSR	APS (100%)
b0680	Reconductor Greene – Letterkenny with 954 ACSR	APS (100%)
b0681	Replace 600/5 CT's at Franklin 138 kV	APS (100%)
b0682	Replace 600/5 CT's at Whiteley 138 kV	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0684	Reconductor Guilford – South Chambersburg with 954 ACSR	APS (100%)
b0685	Replace Ringgold 230/138 kV #3 with larger transformer	APS (71.93%) / JCPL (4.17%) / ME (6.79%) / NEPTUNE* (0.38%) / PECO (4.05%) / PENELEC (5.88%) / ECP** (0.18%) / PSEG (6.37%) / RE (0.25%)
b0704	Install a third Cabot 500/138 kV transformer	APS (74.36%) / DL (2.73%) PENELEC (22.91%)
b0797	Advance n0321 (Replace Doubs Circuit Breaker DJ2)	APS(100%)
b0798	Advance n0322 (Replace Doubs Circuit Breaker DJ3)	APS(100%)
b0799	Advance n0323 (Replace Doubs Circuit Breaker DJ6)	APS(100%)
b0800	Advance n0327 (Replace Doubs Circuit Breaker DJ16)	APS(100%)
b0941	Replace Opequon 138 kV breaker 'BUSTIE'	APS(100%)
b0942	Replace Butler 138 kV breaker '#1 BANK'	APS(100%)
b0943	Replace Butler 138 kV breaker '#2 BANK'	APS(100%)
b0944	Replace Yukon 138 kV breaker 'Y-8'	APS(100%)
b0945	Replace Yukon 138 kV breaker 'Y-3'	APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0946	Replace Yukon 138 kV breaker 'Y-1'		APS(100%)
b0947	Replace Yukon 138 kV breaker 'Y-5'		APS(100%)
b0948	Replace Yukon 138 kV breaker 'Y-2'		APS(100%)
b0949	Replace Yukon 138 kV breaker 'Y-19'		APS(100%)
b0950	Replace Yukon 138 kV breaker 'Y-4'		APS(100%)
b0951	Replace Yukon 138 kV breaker 'Y-9'		APS(100%)
b0952	Replace Yukon 138 kV breaker 'Y-11'		APS(100%)
b0953	Replace Yukon 138 kV breaker 'Y-13'		APS(100%)
b0954	Replace Charleroi 138 kV breaker '#1 XFMR BANK'		APS(100%)
b0955	Replace Yukon 138 kV breaker 'Y-7'		APS(100%)
b0956	Replace Pruntytown 138 kV breaker 'P-9'		APS(100%)
b0957	Replace Pruntytown 138 kV breaker 'P-12'		APS(100%)
b0958	Replace Pruntytown 138 kV breaker 'P-15'		APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0959	Replace Charleroi 138 kV breaker '#2 XFMR BANK'		APS(100%)
b0960	Replace Pruntytown 138 kV breaker 'P-2'		APS(100%)
b0961	Replace Pruntytown 138 kV breaker 'P-5'		APS(100%)
b0962	Replace Yukon 138 kV breaker 'Y-18'		APS(100%)
b0963	Replace Yukon 138 kV breaker 'Y-10'		APS(100%)
b0964	Replace Pruntytown 138 kV breaker 'P-11'		APS(100%)
b0965	Replace Springdale 138 kV breaker '138E'		APS(100%)
b0966	Replace Pruntytown 138 kV breaker 'P-8'		APS(100%)
b0967	Replace Pruntytown 138 kV breaker 'P-14'		APS(100%)
b0968	Replace Ringgold 138 kV breaker '#3 XFMR BANK'		APS(100%)
b0969	Replace Springdale 138 kV breaker '138C'		APS(100%)
b0970	Replace Rivesville 138 kV breaker '#8 XFMR BANK'		APS(100%)
b0971	Replace Springdale 138 kV breaker '138F'		APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0972	Replace Belmont 138 kV breaker 'B-16'		APS(100%)
b0973	Replace Springdale 138 kV breaker '138G'		APS(100%)
b0974	Replace Springdale 138 kV breaker '138V'		APS(100%)
b0975	Replace Armstrong 138 kV breaker 'BROOKVILLE'		APS(100%)
b0976	Replace Springdale 138 kV breaker '138P'		APS(100%)
b0977	Replace Belmont 138 kV breaker 'B-17'		APS(100%)
b0978	Replace Springdale 138 kV breaker '138U'		APS(100%)
b0979	Replace Springdale 138 kV breaker '138D'		APS(100%)
b0980	Replace Springdale 138 kV breaker '138R'		APS(100%)
b0981	Replace Yukon 138 kV breaker 'Y-12'		APS(100%)
b0982	Replace Yukon 138 kV breaker 'Y-17'		APS(100%)
b0983	Replace Yukon 138 kV breaker 'Y-14'		APS(100%)
b0984	Replace Rivesville 138 kV breaker '#10 XFMR BANK'		APS(100%)
b0985	Replace Belmont 138 kV breaker 'B-14'		APS(100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0986	Replace Armstrong 138 kV breaker 'RESERVE BUS'		APS(100%)
b0987	Replace Yukon 138 kV breaker 'Y-16'		APS(100%)
b0988	Replace Springdale 138 kV breaker '138T'		APS(100%)
b0989	Replace Edgelawn 138 kV breaker 'GOFF RUN #632'		APS(100%)
b0990	Change reclosing on Cabot 138 kV breaker 'C-9'		APS(100%)
b0991	Change reclosing on Belmont 138 kV breaker 'B-7'		APS(100%)
b0992	Change reclosing on Belmont 138 kV breaker 'B-12'		APS(100%)
b0993	Change reclosing on Belmont 138 kV breaker 'B-9'		APS(100%)
b0994	Change reclosing on Belmont 138 kV breaker 'B-19'		APS(100%)
b0995	Change reclosing on Belmont 138 kV breaker 'B-21'		APS(100%)
b0996	Change reclosing on Willow Island 138 kV breaker 'FAIRVIEW #84'		APS(100%)
b0997	Change reclosing on Cabot 138 kV breaker 'C-4'		APS(100%)
b0998	Change reclosing on Cabot 138 kV breaker 'C-1'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0999	Replace Redbud 138 kV breaker 'BUS TIE'		APS(100%)
b1022.1	Reconfigure the Peters to Bethel Park 138 kV line and Elrama to Woodville 138 kV line to create a 138 kV path from Woodville to Peters and a 138 kV path from Elrama to Bethel Park		APS (96.98%) / DL (3.02%)
b1022.3	Add static capacitors at Smith 138 kV		APS (96.98%) / DL (3.02%)
b1022.4	Add static capacitors at North Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.5	Add static capacitors at South Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.6	Add static capacitors at Manifold 138 kV		APS (96.98%) / DL (3.02%)
b1022.7	Add static capacitors at Houston 138 kV		APS (96.98%) / DL (3.02%)
b1023.1	Install a 500/138 kV transformer at 502 Junction		APS (100%)
b1023.2	Construct a new Franklin - 502 Junction 138 kV line including a rebuild of the Whiteley - Franklin 138 kV line to double circuit		APS (100%)
b1023.3	Construct a new 502 Junction - Osage 138 kV line		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1023.4	Construct Braddock 138 kV breaker station that connects the Charleroi - Gordon 138 kV line, Washington - Franklin 138 kV line and the Washington - Vanceville 138 kV line including a 66 MVAR capacitor	APS (100%)
b1027	Increase the size of the shunt capacitors at Enon 138 kV	APS (100%)
b1028	Raise three structures on the Osage - Collins Ferry 138 kV line to increase the line rating	APS (100%)
b1128	Reconductor the Edgewater – Vasco Tap; Edgewater – Loyalhanna 138 kV lines with 954 ACSR	APS (100%)
b1129	Reconductor the East Waynesboro – Ringgold 138 kV line with 954 ACSR	APS (100%)
b1131	Upgrade Double Tollgate – Meadowbrook MDT Terminal Equipment	APS (100%)
b1132	Upgrade Double Tollgate-Meadowbrook MBG terminal equipment	APS (100%)
b1133	Upgrade terminal equipment at Springdale	APS (100%)
b1135	Reconductor the Bartonville – Meadowbrook 138 kV line with high temperature conductor	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1137 Reconductor the Eastgate – Luxor 138 kV; Eastgate – Sony 138 kV line with 954 ACSR		APS (78.59%) / PENELEC (14.08%) / ECP ** (0.23%) / PSEG (6.83%) / RE (0.27%)
b1138 Reconductor the King Farm – Sony 138 kV line with 954 ACSR		APS (100%)
b1139 Reconductor the Yukon – Waltz Mills 138 kV line with high temperature conductor		APS (100%)
b1140 Reconductor the Bracken Junction – Luxor 138 kV line with 954 ACSR		APS (100%)
b1141 Reconductor the Sewickley – Waltz Mills Tap 138 kV line with high temperature conductor		APS (100%)
b1142 Reconductor the Bartonsville – Stephenson 138 kV; Stonewall – Stephenson 138 kV line with 954 ACSR		APS (100%)
b1143 Reconductor the Youngwood – Yukon 138 kV line with high temperature conductor		APS (89.92%) / PENELEC (10.08%)
b1144 Reconductor the Bull Creek Junction – Cabot 138 kV line with high temperature conductor		APS (100%)

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1145	Reconductor the Lawson Junction – Cabot 138 kV line with high temperature conductor	APS (100%)
b1146	Replace Layton - Smithton #61 138 kV line structures to increase line rating	APS (100%)
b1147	Replace Smith – Yukon 138 kV line structures to increase line rating	APS (100%)
b1148	Reconductor the Loyalhanna – Luxor 138 kV line with 954 ACSR	APS (100%)
b1149	Reconductor the Luxor – Stony Springs Junction 138 kV line with 954 ACSR	APS (100%)
b1150	Upgrade terminal equipment at Social Hall	APS (100%)
b1151	Reconductor the Greenwood – Redbud 138 kV line with 954 ACSR	APS (100%)
b1152	Reconductor Grand Point – South Chambersburg	APS (100%)
b1159	Replace Peters 138 kV breaker ‘Bethel P OCB’	APS (100%)
b1160	Replace Peters 138 kV breaker ‘Cecil OCB’	APS (100%)
b1161	Replace Peters 138 kV breaker ‘Union JctOCB’	APS (100%)
b1162	Replace Double Toll Gate 138 kV breaker ‘DRB-2’	APS (100%)
b1163	Replace Double Toll Gate 138 kV breaker ‘DT 138 kV OCB’	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1164	Replace Cecil 138 kV breaker 'Enlow OCB'	APS (100%)
b1165	Replace Cecil 138 kV breaker 'South Fayette'	APS (100%)
b1166	Replace Wylie Ridge 138 kV breaker 'W-9'	APS (100%)
b1167	Replace Reid 138 kV breaker 'RI-2'	APS (100%)
b1171.1	Install the second Black Oak 500/138 kV transformer, two 138 kV breaker, and related substation work	BGE (20.76%) / DPL (3.14%) / Dominion (39.55%) / ME (2.71%) / PECO (3.36%) / PEPCO (30.48%)
b1171.3	Install six 500 kV breakers and remove BOL1 500 kV breaker at Black Oak	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b1200	Reconductor Double Toll Gate – Greenwood 138 kV with 954 ACSR conductor	APS (100%)
b1221.1	Convert Carbon Center from 138 kV to a 230 kV ring bus	APS (100%)
b1221.2	Construct Bear Run 230 kV substation with 230/138 kV transformer	APS (100%)

\*Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1221.3	Loop Carbon Center Junction – Williamette line into Bear Run	APS (100%)
b1221.4	Carbon Center – Carbon Center Junction & Carbon Center Junction – Bear Run conversion from 138 kV to 230 kV	APS (100%)
b1230	Reconductor Willow-Eureka & Eureka-St Mary 138 kV lines	APS (100%)
b1232	Reconductor Nipetown – Reid 138 kV with 1033 ACCR	AEC (1.40%) / APS (75.74%) / DPL (1.92%) / JCPL (2.92%) / ME (6.10%) / Neptune (0.27%) / PECO (4.40%) / PENELEC (3.26%) / PPL (3.99%)
b1233.1	Upgrade terminal equipment at Washington	APS (100%)
b1234	Replace structures between Ridgeway and Paper city	APS (100%)
b1235	Reconductor the Albright – Black Oak AFA 138 kV line with 795 ACSS/TW	APS (30.25%) / BGE (16.10%) / Dominion (30.51%) / PEPCO (23.14%)
b1237	Upgrade terminal equipment at Albright, replace bus and line side breaker disconnects and leads, replace breaker risers, upgrade RTU and line	APS (100%)
b1238	Install a 138 kV 44 MVAR capacitor at Edgelawn substation	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1239	Install a 138 kV 44 MVAR capacitor at Ridgeway substation	APS (100%)
b1240	Install a 138 kV 44 MVAR capacitor at Elko Substation	APS (100%)
b1241	Upgrade terminal equipment at Washington substation on the GE Plastics/DuPont terminal	APS (100%)
b1242	Replace structures between Collins Ferry and West Run	APS (100%)
b1243	Install a 138 kV capacitor at Potter Substation	APS (100%)
b1261	Replace Butler 138 kV breaker '1-2 BUS 138'	APS (100%)
b1383	Install 2nd 500/138 kV transformer at 502 Junction	APS (93.27%) / DL (5.39%) / PENELEC (1.34%)
b1384	Reconductor approximately 2.17 miles of Bedington – Shepherdstown 138 kV with 954 ACSR	APS (100%)
b1385	Reconductor Halfway – Paramount 138 kV with 1033 ACCR	APS (100%)
b1386	Reconductor Double Tollgate – Meadow Brook 138 kV ckt 2 with 1033 ACCR	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1387	Reconductor Double Tollgate – Meadow Brook 138 kV	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1388	Reconductor Feagans Mill – Millville 138 kV with 954 ACSR	APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1389	Reconductor Bens Run – St. Mary’s 138 kV with 954 ACSR		AEP (12.40%) / APS (17.80%) / DL (69.80%)
b1390	Replace Bus Tie Breaker at Opequon		APS (100%)
b1391	Replace Line Trap at Gore		APS (100%)
b1392	Replace structure on Belmont – Trissler 138 kV line		APS (100%)
b1393	Replace structures Kingwood – Pruntytown 138 kV line		APS (100%)
b1395	Upgrade Terminal Equipment at Kittanning		APS (100%)
b1401	Change reclosing on Pruntytown 138 kV breaker ‘P-16’ to 1 shot at 15 seconds		APS (100%)
b1402	Change reclosing on Rivesville 138 kV breaker ‘Pruntytown #34’ to 1 shot at 15 seconds		APS (100%)
b1403	Change reclosing on Yukon 138 kV breaker ‘Y21 Shepler’ to 1 shot at 15 seconds		APS (100%)
b1404	Replace the Kiski Valley 138 kV breaker ‘Vandergrift’ with a 40 kA breaker		APS (100%)
b1405	Change reclosing on Armstrong 138 kV breaker ‘GARETTRJCT’ at 1 shot at 15 seconds		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b1406	Change reclosing on Armstrong 138 kV breaker 'KITANNING' to 1 shot at 15 seconds		APS (100%)
b1407	Change reclosing on Armstrong 138 kV breaker 'BURMA' to 1 shot at 15 seconds		APS (100%)
b1408	Replace the Weirton 138 kV breaker 'Tidd 224' with a 40 kA breaker		APS (100%)
b1409	Replace the Cabot 138 kV breaker 'C9 Kiski Valley' with a 40 kA breaker		APS (100%)
b1507.2	Terminal Equipment upgrade at Doubs substation		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>APS (22.34%) / BGE (11.58%) /</u> <u>Dominion (52.51%) / PEPCO</u> <u>(13.57%)</u>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1507.3	Mt. Storm – Doubs transmission line rebuild in Maryland – Total line mileage for APS is 2.71 miles	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)</u></p>
b1510	Install 59.4 MVAR capacitor at Waverly	APS (100%)
b1672	Install a 230 kV breaker at Carbon Center	APS (100%)
b0539	Replace Doubs circuit breaker DJ11	APS (100%)
b0540	Replace Doubs circuit breaker DJ12	APS (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0541	Replace Doubs circuit breaker DJ13		APS (100%)
b0542	Replace Doubs circuit breaker DJ20		APS (100%)
b0543	Replace Doubs circuit breaker DJ21		APS (100%)
b0544	Remove instantaneous reclose from Eastalco circuit breaker D-26		APS (100%)
b0545	Remove instantaneous reclose from Eastalco circuit breaker D-28		APS (100%)
b0559	Install 200 MVAR capacitor at Meadow Brook 500 kV substation		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>

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\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

**Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)**

b0560	Install 250 MVAR capacitor at Kemptown 500 kV substation		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
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\* Neptune Regional Transmission System, LLC

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1803	Build a 300 MVAR Switched Shunt at Doubs 500 kV and increase (~50 MVAR) in size the existing Switched Shunt at Doubs 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)</u></p>
b1804	Install a new 600 MVAR SVC at Meadowbrook 500kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u></p>
b1816.1	Replace relaying at the Mt. Airy substation on the Carroll - Mt. Airy 230 kV line	APS (100%)

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\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1816.2	Adjust the control settings of all existing capacitors at Mt Airy 34.5kV, Monocacy 138kV, Ringgold 138kV served by Potomac Edison's Eastern 230 kV network to ensure that all units will be on during the identified N-1-1 contingencies		APS (100%)
b1816.3	Replace existing unidirectional LTC controller on the No. 4, 230/138 kV transformer at Carroll substation with a bidirectional unit		APS (100%)
b1816.4	Isolate and bypass the 138 kV reactor at Germantown Substation		APS (100%)
b1816.6	Replace 336.4 ACSR conductor on the Catocin - Carroll 138 kV line using 556.5 ACSR (26/7) or equivalent on existing structures (12.7 miles), 800 A wave traps at Carroll and Catocin with 1200 A units, and 556.5 ACSR SCCIR (Sub-conductor) line risers and bus traps with 795 ACSR or equivalent		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1822	Replace the 1200 A wave trap, line risers, breaker risers with 1600 A capacity terminal equipment at Reid 138 kV SS		APS (100%)
b1823	Replace the 800 A wave trap with a 1200 A wave trap at Millville 138 kV substation		APS (100%)
b1824	Reconductor Grant Point - Guilford 138kV line approximately 8 miles of 556 ACSR with 795 ACSR		APS (100%)
b1825	Replace the 800 Amp line trap at Butler 138 kV Sub on the Cabot East 138 kV line		APS (100%)
b1826	Change the CT ratio at Double Toll Gate 138 kV SS on MDT line		APS (100%)
b1827	Change the CT ratio at Double Toll Gate 138 kV SS on MBG line		APS (100%)
b1828.1	Reconductor the Bartonville – Stephenson 3.03 mile 138 kV line of 556 ACSR with 795 ACSR		APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1828.2	Reconductor the Stonewall – Stephenson 2.08 mile 138 kV line of 556 ACSR with 795 ACSR	APS (100%)
b1829	Replace the existing 138 kV 556.5 ACSR substation conductor risers with 954 ACSR at the Redbud 138 kV substation, including but not limited to the line side disconnect leads	APS (100%)
b1830	Replace 1200 A wave trap and 1024 ACAR breaker risers at Halfway 138 kV substation, and replace 1024 ACAR breaker risers at Paramount 138 kV substation	APS (100%)
b1832	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 1 (207) 230 kV line terminal	APS (100%)
b1833	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 2 (231) 230 kV line terminal	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1835	Reconductor 14.3 miles of 556 ACSR with 795 ACSR from Old Chapel to Millville 138 kV and upgrade line risers at Old Chapel 138 kV and Millville 138 kV and replace 1200 A wave trap at Millville 138 kV	APS (37.68%) / Dominion (34.46%) / PEPCO (13.69%) / BGE (11.45%) / ME (2.01%) / PENELEC (0.53%) / DL (0.18%)
b1836	Replace 1200 A wave trap with 1600 A wave trap at Reid 138 kV SS	APS (100%)
b1837	Replace 750 CU breaker risers with 795 ACSR at Marlowe 138 kV and replace 1200 A wave traps with 1600 A wave traps at Marlowe 138 kV and Bedington 138 kV	APS (100%)
b1838	Replace the 1200 A Bedington 138 kV line air switch and the 1200 A 138 kV bus tie air switch at Nipetown 138 kV with 1600 A switches	APS (100%)
b1839	Install additional 33 MVAR capacitors at Grand Point 138 kV SS and Guildford 138 kV SS	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1840	Construct a 138 kV line between Buckhannon and Weston 138 kV substations	APS (100%)
b1902	Replace line trap at Stonewall on the Stephenson 138 kV line terminal	APS (100%)
b1941	Loop the Homer City-Handsome Lake 345 kV line into the Armstrong substation and install a 345/138 kV transformer at Armstrong	APS (67.86%) / PENELEC (32.14%)
b1942	Change the CT ratio at Millville to improve the Millville – Old Chapel 138 kV line ratings	APS (100%)
b1964	Convert Moshannon substation to a 4 breaker 230 kV ring bus	APS (41.06%) / DPL (6.68%) / JCPL (5.48%) / ME (10.70%) / Neptune* (0.53%) / PECO (15.53%) / PPL (20.02%)
b1965	Install a 44 MVAR 138 kV capacitor at Luxor substation	APS (100%)
b1986	Upgrade the AP portion of the Elrama – Mitchell 138 kV line by replace breaker risers on the Mitchell 138 kV bus on the Elrama terminal	APS (100%)
b1987	Reconductor the Osage-Collins Ferry 138 kV line with 795 ACSS. Upgrade terminal equipment at Osage and Collins Ferry	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1988	Raise structures between Lake Lynn and West Run to eliminate the clearance de-rates on the West Run – Lake Lynn 138 kV line	APS (100%)
b1989	Raise structures between Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line	APS (100%)
b2095	Replace Weirt 138 kV breaker 'S-TORONTO226' with 63kA rated breaker	APS (100%)
b2096	Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'	APS (100%)
b2097	Replace Ridgeley 138 kV breaker '#2 XFMR OCB'	APS (100%)
b2098	Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker	APS (100%)
b2099	Revise the reclosing of Ridgeley 138 kV breaker 'RC1'	APS (100%)
b2100	Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker	APS (100%)
b2101	Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker	APS (100%)
b2102	Replace Armstrong 138 kV breaker 'GARETTRJCT' with 40kA rated breaker	APS (100%)

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\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2103	Replace Armstrong 138 kV breaker 'BURMA' with 40kA rated breaker		APS (100%)
b2104	Replace Armstrong 138 kV breaker 'KITANNING' with 40kA rated breaker		APS (100%)
b2105	Replace Armstrong 138 kV breaker 'KISSINGERJCT' with 40kA rated breaker		APS (100%)
b2106	Replace Wylie Ridge 345 kV breaker 'WK-1' with 63kA rated breaker		APS (100%)
b2107	Replace Wylie Ridge 345 kV breaker 'WK-2' with 63kA rated breaker		APS (100%)
b2108	Replace Wylie Ridge 345 kV breaker 'WK-3' with 63kA rated breaker		APS (100%)
b2109	Replace Wylie Ridge 345 kV breaker 'WK-4' with 63kA rated breaker		APS (100%)
b2110	Replace Wylie Ridge 345 kV breaker 'WK-6' with 63kA rated breaker		APS (100%)
b2111	Replace Wylie Ridge 138 kV breaker 'WK-7' with 63kA rated breaker		APS (100%)
b2112	Replace Wylie Ridge 345 kV breaker 'WK-5'		APS (100%)
b2113	Replace Weirton 138 kV breaker 'NO 6 XFMR' with 63kA rated breaker		APS (100%)
b2114	Replace Armstrong 138 kV breaker 'Bus-Tie' (Status On-Hold pending retirement)		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2124.1	Add a new 138 kV line exit		APS (100%)
b2124.2	Construct a 138 kV ring bus and install a 138/69 kV autotransformer		APS (100%)
b2124.3	Add new 138 kV line exit and install a 138/25 kV transformer		APS (100%)
b2124.4	Construct approximately 5.5 miles of 138 kV line		APS (100%)
b2124.5	Convert approximately 7.5 miles of 69 kV to 138 kV		APS (100%)
b2156	Install a 75 MVAR 230 kV capacitor at Shingletown Substation		APS (100%)
b2165	Replace 800A wave trap at Stonewall with a 1200 A wave trap		APS (100%)
b2166	Reconductor the Millville – Sleepy Hollow 138kV 4.25 miles of 556 ACSR with 795 ACSR, upgrade line risers at Sleepy Hollow, and change 1200 A CT tap at Millville to 800		APS (100%)
b2168	For Grassy Falls 138kV Capacitor bank adjust turn-on voltage to 1.0pu with a high limit of 1.04pu, For Crupperneck and Powell Mountain 138kV Capacitor Banks adjust turn-on voltage to 1.01pu with a high limit of 1.035pu		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2169	Replace/Raise structures on the Yukon-Smithton 138 kV line section to eliminate clearance de-rate	APS (100%)
b2170	Replace/Raise structures on the Smithton-Shepler Hill Jct 138 kV line section to eliminate clearance de-rate	APS (100%)
b2171	Replace/Raise structures on the Parsons-William 138 kV line section to eliminate clearance de-rate	APS (100%)
b2172	Replace/Raise structures on the Parsons - Loughs Lane 138 kV line section to eliminate clearance de-rate	APS (100%)

## SCHEDULE 12 – APPENDIX

- (17) **AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0318	Install a 765/138 kV transformer at Amos		AEP (99.00%) / PEPCO (1.00%)
b0324	Replace entrance conductors, wave traps, and risers at the Tidd 345 kV station on the Tidd – Canton Central 345 kV circuit		AEP (100%)
b0447	Replace Cook 345 kV breaker M2		AEP (100%)
b0448	Replace Cook 345 kV breaker N2		AEP (100%)
b0490	Construct an Amos – Bedington 765 kV circuit (AEP equipment)	As specified under the procedures detailed in Attachment H-19B	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.



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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.2	Replace Amos 138 kV breaker 'B'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0490.3	Replace Amos 138 kV breaker 'B1'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.4	Replace Amos 138 kV breaker 'C'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>
b0490.5	Replace Amos 138 kV breaker 'C1'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.6	Replace Amos 138 kV breaker 'D'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0490.7	Replace Amos 138 kV breaker 'D2'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.8	Replace Amos 138 kV breaker 'E'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0490.9	Replace Amos 138 kV breaker 'E2'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0504	Add two advanced technology circuit breakers at Hanging Rock 765 kV to improve operational performance		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) / DPL  (2.60%) / Dominion (12.32%) /  EKPC (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEP (100%)</u></p>
b0570	Reconductor East Side Lima – Sterling 138 kV		AEP (41.99%) / ComEd (58.01%)
b0571	Reconductor West Millersport – Millersport 138 kV		AEP (73.83%) / ComEd (19.26%) / Dayton (6.91%)
b0748	Establish a new 69 kV circuit between the Canal Road and East Wooster stations, establish a new 69 kV circuit between the West Millersburg and Moreland Switch stations (via Shreve), add reactive support via cap banks		AEP (100%)
b0838	Hazard Area 138 kV and 69 kV Improvement Projects		AEP (100%)
b0839	Replace existing 450 MVA transformer at Twin Branch 345 / 138 kV with a 675 MVA transformer		AEP (99.73%) / Dayton (0.27%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0840	String a second 138 kV circuit on the open tower position between Twin Branch and East Elkhart	AEP (100%)
b0840.1	Establish a new 138/69-34.5kV Station to interconnect the existing 34.5kV network	AEP (100%)
b0917	Replace Baileysville 138 kV breaker 'P'	AEP (100%)
b0918	Replace Riverview 138 kV breaker '634'	AEP (100%)
b0919	Replace Torrey 138 kV breaker 'W'	AEP (100%)
b1032.1	Construct a new 345/138kV station on the Marquis-Bixby 345kV line near the intersection with Ross - Highland 69kV	AEP (89.97%) / Dayton (10.03%)
b1032.2	Construct two 138kV outlets to Delano 138kV station and to Camp Sherman station	AEP (89.97%) / Dayton (10.03%)
b1032.3	Convert Ross - Circleville 69kV to 138kV	AEP (89.97%) / Dayton (10.03%)
b1032.4	Install 138/69kV transformer at new station and connect in the Ross - Highland 69kV line	AEP (89.97%) / Dayton (10.03%)
b1033	Add a third delivery point from AEP's East Danville Station to the City of Danville.	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.1	Establish new South Canton - West Canton 138kV line (replacing Torrey - West Canton) and Wagenhals - Wayview 138kV	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.2	Loop the existing South Canton - Wayview 138kV circuit in-and-out of West Canton	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.3	Install a 345/138kV 450 MVA transformer at Canton Central	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.4	Rebuild/reconductor the Sunnyside - Torrey 138kV line	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.5	Disconnect/eliminate the West Canton 138kV terminal at Torrey Station	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.6	Replace all 138kV circuit breakers at South Canton Station and operate the station in a breaker and a half configuration	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.7	Replace all obsolete 138kV circuit breakers at the Torrey and Wagenhals stations	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.8	Install additional 138kV circuit breakers at the West Canton, South Canton, Canton Central, and Wagenhals stations to accommodate the new circuits	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1035	Establish a third 345kV breaker string in the West Millersport Station. Construct a new West Millersport – Gahanna 138kV circuit. Miscellaneous improvements to 138kV transmission system.	AEP (100%)
b1036	Upgrade terminal equipment at Poston Station and update remote end relays	AEP (100%)
b1037	Sag check Bonsack–Cloverdale 138 kV, Cloverdale–Centerville 138kV, Centerville–Ivy Hill 138kV, Ivy Hill–Reusens 138kV, Bonsack–Reusens 138kV and Reusens–Monel–Gomingo–Joshua Falls 138 kV.	AEP (100%)
b1038	Check the Crooksville - Muskingum 138 kV sag and perform the required work to improve the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1039	Perform a sag study for the Madison – Cross Street 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1040	Rebuild an 0.065 mile section of the New Carlisle – Olive 138 kV line and change the 138 kV line switches at New Carlisle	AEP (100%)
b1041	Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating	AEP (100%)
b1042	Perform sag studies to raise the emergency rating of Amos – Poca 138kV	AEP (100%)
b1043	Perform sag studies to raise the emergency rating of Turner - Ruth 138kV	AEP (100%)
b1044	Perform sag studies to raise the emergency rating of Kenova – South Point 138kV	AEP (100%)
b1045	Perform sag studies of Tri State - Darrah 138 kV	AEP (100%)
b1046	Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating	AEP (100%)
b1047	Perform sag study of Otter Switch - Altavista 138kV to raise the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1048	Reconductor the Bixby - Three C - Groves and Bixby - Groves 138 kV tower line	AEP (100%)
b1049	Upgrade the risers at the Riverside station to increase the rating of Benton Harbor – Riverside 138kV	AEP (100%)
b1050	Rebuilding and reconductor the Bixby – Pickerington Road - West Lancaster 138 kV line	AEP (100%)
b1051	Perform a sag study for the Kenzie Creek – Pokagon 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1052	Unsix-wire the existing Hyatt - Sawmill 138 kV line to form two Hyatt - Sawmill 138 kV circuits	AEP (100%)
b1053	Perform a sag study and remediation of 32 miles between Claytor and Matt Funk.	AEP (100%)
b1091	Add 28.8 MVAR 138 kV capacitor bank at Huffman and 43.2 MVAR 138 kV Bank at Jubal Early and 52.8 MVAR 138 kV Bank at Progress Park Stations	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1092	Add 28.8 MVAR 138 kV capacitor bank at Sullivan Gardens and 52.8 MVAR 138 kV Bank at Reedy Creek Stations	AEP (100%)
b1093	Add a 43.2 MVAR capacitor bank at the Morgan Fork 138 kV Station	AEP (100%)
b1094	Add a 64.8 MVAR capacitor bank at the West Huntington 138 kV Station	AEP (100%)
b1108	Replace Ohio Central 138 kV breaker 'C2'	AEP (100%)
b1109	Replace Ohio Central 138 kV breaker 'D1'	AEP (100%)
b1110	Replace Sporn A 138 kV breaker 'J'	AEP (100%)
b1111	Replace Sporn A 138 kV breaker 'J2'	AEP (100%)
b1112	Replace Sporn A 138 kV breaker 'L'	AEP (100%)
b1113	Replace Sporn A 138 kV breaker 'L1'	AEP (100%)
b1114	Replace Sporn A 138 kV breaker 'L2'	AEP (100%)
b1115	Replace Sporn A 138 kV breaker 'N'	AEP (100%)
b1116	Replace Sporn A 138 kV breaker 'N2'	AEP (100%)
b1227	Perform a sag study on Altavista – Leesville 138 kV circuit	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1231	Replace the existing 138/69-12 kV transformer at West Moulton Station with a 138/69 kV transformer and a 69/12 kV transformer	AEP (96.69%) / Dayton (3.31%)
b1375	Replace Roanoke 138 kV breaker 'T'	AEP (100%)
b1376	Replace Roanoke 138 kV breaker 'E'	AEP (100%)
b1377	Replace Roanoke 138 kV breaker 'F'	AEP (100%)
b1378	Replace Roanoke 138 kV breaker 'G'	AEP (100%)
b1379	Replace Roanoke 138 kV breaker 'B'	AEP (100%)
b1380	Replace Roanoke 138 kV breaker 'A'	AEP (100%)
b1381	Replace Olive 345 kV breaker 'E'	AEP (100%)
b1382	Replace Olive 345 kV breaker 'R2'	AEP (100%)
b1416	Perform a sag study on the Desoto – Deer Creek 138 kV line to increase the emergency rating	AEP (100%)
b1417	Perform a sag study on the Delaware – Madison 138 kV line to increase the emergency rating	AEP (100%)
b1418	Perform a sag study on the Rockhill – East Lima 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1419	Perform a sag study on the Findlay Center – Fostoria Ctl 138 kV line to increase the emergency rating	AEP (100%)
b1420	A sag study will be required to increase the emergency rating for this line. Depending on the outcome of this study, more action may be required in order to increase the rating	AEP (100%)
b1421	Perform a sag study on the Sorenson – McKinley 138 kV line to increase the emergency rating	AEP (100%)
b1422	Perform a sag study on John Amos – St. Albans 138 kV line to allow for operation up to its conductor emergency rating	AEP (100%)
b1423	A sag study will be performed on the Chemical – Capitol Hill 138 kV line to determine if the emergency rating can be utilized	AEP (100%)
b1424	Perform a sag study for Benton Harbor – West Street – Hartford 138 kV line to improve the emergency rating	AEP (100%)
b1425	Perform a sag study for the East Monument – East Danville 138 kV line to allow for operation up to the conductor's maximum operating temperature	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1426	Perform a sag study for the Reusens – Graves 138 kV line to allow for operation up to the conductor’s maximum operating temperature	AEP (100%)
b1427	Perform a sag study on Smith Mountain – Leesville – Altavista – Otter 138 kV and on Boones – Forest – New London – JohnsMT – Otter	AEP (100%)
b1428	Perform a sag study on Smith Mountain – Candler’s Mountain 138 kV and Joshua Falls – Cloverdale 765 kV to allow for operation up to	AEP (100%)
b1429	Perform a sag study on Fremont – Clinch River 138 kV to allow for operation up to its conductor emergency ratings	AEP (100%)
b1430	Install a new 138 kV circuit breaker at Benton Harbor station and move the load from Watervliet 34.5 kV station to West street 138 kV	AEP (100%)
b1432	Perform a sag study on the Kenova – Tri State 138 kV line to allow for operation up to their conductor emergency rating	AEP (100%)
b1433	Replace risers in the West Huntington Station to increase the line ratings which would eliminate the overloads for the contingencies listed	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1434	Perform a sag study on the line from Desoto to Madison. Replace bus and risers at Daleville station and replace bus and risers at Madison	AEP (100%)
b1435	Replace the 2870 MCM ACSR riser at the Sporn station	AEP (100%)
b1436	Perform a sag study on the Sorenson – Illinois Road 138 kV line to increase the emergency MOT for this line. Replace bus and risers at Illinois Road	AEP (100%)
b1437	Perform sag study on Rock Cr. – Hummel Cr. 138 kV to increase the emergency MOT for the line, replace bus and risers at Huntington J., and replace relays for Hummel Cr. – Hunt – Soren. Line at Soren	AEP (100%)
b1438	Replacement of risers at McKinley and Industrial Park stations and performance of a sag study for the 4.53 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1439	By replacing the risers at Lincoln both the Summer Normal and Summer Emergency ratings will improve to 268 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1440	By replacing the breakers at Lincoln the Summer Emergency rating will improve to 251 MVA	AEP (100%)
b1441	Replacement of risers at South Side and performance of a sag study for the 1.91 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1442	Replacement of 954 ACSR conductor with 1033 ACSR and performance of a sag study for the 4.54 miles of 2-636 ACSR section is expected	AEP (100%)
b1443	Station work at Thelma and Busseyville Stations will be performed to replace bus and risers	AEP (100%)
b1444	Perform electrical clearance studies on Clinch River – Clinchfield 139 kV line (a.k.a. sag studies) to determine if the emergency ratings can be utilized	AEP (100%)
b1445	Perform a sag study on the Addison (Buckeye CO-OP) – Thinever and North Crown City – Thivener 138 kV sag study and switch	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1446	Perform a sag study on the Parkersburg (Allegheny Power) – Belpre (AEP) 138 kV	AEP (100%)
b1447	Dexter – Elliot tap 138 kV sag check	AEP (100%)
b1448	Dexter – Meigs 138 kV Electrical Clearance Study	AEP (100%)
b1449	Meigs tap – Rutland 138 kV sag check	AEP (100%)
b1450	Muskingum – North Muskingum 138 kV sag check	AEP (100%)
b1451	North Newark – Sharp Road 138 kV sag check	AEP (100%)
b1452	North Zanesville – Zanesville 138 kV sag check	AEP (100%)
b1453	North Zanesville – Powelson and Ohio Central – Powelson 138 kV sag check	AEP (100%)
b1454	Perform an electrical clearance study on the Ross – Delano – Scioto Trail 138 kV line to determine if the emergency rating can be utilized	AEP (100%)
b1455	Perform a sag check on the Sunny – Canton Central – Wagenhals 138 kV line to determine if all circuits can be operated at their summer emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1456	The Tidd – West Bellaire 345 kV circuit has been de-rated to its normal rating and would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)
b1457	The Tiltonsville – Windsor 138 kV circuit has been derated to its normal rating and would need an electrical clearance study to determine if the emergency rating could be utilized	AEP (100%)
b1458	Install three new 345 kV breakers at Bixby to separate the Marquis 345 kV line and transformer #2. Operate Circleville – Harrison 138 kV and Harrison – Zuber 138 kV up to conductor emergency ratings	AEP (100%)
b1459	Several circuits have been de-rated to their normal conductor ratings and could benefit from electrical clearance studies to determine if the emergency rating could be utilized	AEP (100%)
b1460	Replace 2156 & 2874 risers	AEP (100%)
b1461	Replace meter, metering CTs and associated equipment at the Paden City feeder	AEP (100%)
b1462	Replace relays at both South Cadiz 138 kV and Tidd 138 kV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1463	Reconductor the Bexley – Groves 138 kV circuit	AEP (100%)
b1464	Corner 138 kV upgrades	AEP (100%)
b1465.1	Add a 3rd 2250 MVA 765/345 kV transformer at Sullivan station	AEC (0.71%) / AEP (75.06%) / APS (1.25%) / BGE (1.81%) / ComEd (5.91%) / Dayton (0.86%) / DL (1.23%) / DPL (0.95%) / Dominion (3.89%) / JCPL (1.58%) / NEPTUNE (0.15%) / HTP (0.07%) / PECO (2.08%) / PEPCO (1.66%) / ECP (0.07%)* / PSEG (2.62%) / RE (0.10%)
b1465.2	Replace the 100 MVAR 765 kV shunt reactor bank on Rockport – Jefferson 765 kV line with a 300 MVAR bank at Rockport Station	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (100%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1465.3	Transpose the Rockport – Sullivan 765 kV line and the Rockport – Jefferson 765 kV line	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEP (100%)</u></p>
b1465.4	Make switching improvements at Sullivan and Jefferson 765 kV stations	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEP (100%)</u></p>
b1466.1	Create an in and out loop at Adams Station by removing the hard tap that currently exists	AEP (100%)
b1466.2	Upgrade the Adams transformer to 90 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1466.3	At Seaman Station install a new 138 kV bus and two new 138 kV circuit breakers	AEP (100%)
b1466.4	Convert South Central Co-op's New Market 69 kV Station to 138 kV	AEP (100%)
b1466.5	The Seaman – Highland circuit is already built to 138 kV, but is currently operating at 69 kV, which would now increase to 138 kV	AEP (100%)
b1466.6	At Highland Station, install a new 138 kV bus, three new 138 kV circuit breakers and a new 138/69 kV 90 MVA transformer	AEP (100%)
b1466.7	Using one of the bays at Highland, build a 138 kV circuit from Hillsboro – Highland 138 kV, which is approximately 3 miles	AEP (100%)
b1467.1	Install a 14.4 MVar Capacitor Bank at New Buffalo station	AEP (100%)
b1467.2	Reconfigure the 138 kV bus at LaPorte Junction station to eliminate a contingency resulting in loss of two 138 kV sources serving the LaPorte area	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1468.1	Expand Selma Parker Station and install a 138/69/34.5 kV transformer	AEP (100%)
b1468.2	Rebuild and convert 34.5 kV line to Winchester to 69 kV, including Farmland Station	AEP (100%)
b1468.3	Retire the 34.5 kV line from Haymond to Selma Wire	AEP (100%)
b1469.1	Conversion of the Newcomerstown – Cambridge 34.5 kV system to 69 kV operation	AEP (100%)
b1469.2	Expansion of the Derwent 69 kV Station (including reconfiguration of the 69 kV system)	AEP (100%)
b1469.3	Rebuild 11.8 miles of 69 kV line, and convert additional 34.5 kV stations to 69 kV operation	AEP (100%)
b1470.1	Build a new 138 kV double circuit off the Kanawha – Bailysville #2 138 kV circuit to Skin Fork Station	AEP (100%)
b1470.2	Install a new 138/46 kV transformer at Skin Fork	AEP (100%)
b1470.3	Replace 5 Moab's on the Kanawha – Baileysville line with breakers at the Sundial 138 kV station	AEP (100%)
b1471	Perform a sag study on the East Lima – For Lima – Rockhill 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1472	Perform a sag study on the East Lima – Haviland 138 kV line to increase the emergency rating		AEP (100%)
b1473	Perform a sag study on the East New Concord – Muskingum River section of the Muskingum River – West Cambridge 138 kV circuit		AEP (100%)
b1474	Perform a sag study on the Ohio Central – Prep Plant tap 138 kV circuit		AEP (100%)
b1475	Perform a sag study on the S73 – North Delphos 138 kV line to increase the emergency rating		AEP (100%)
b1476	Perform a sag study on the S73 – T131 138 kV line to increase the emergency rating		AEP (100%)
b1477	The Natrium – North Martin 138 kV circuit would need an electrical clearance study among other equipment upgrades		AEP (100%)
b1478	Upgrade Strouds Run – Strouds Tap 138 kV relay and riser		AEP (100%)
b1479	West Hebron station upgrades		AEP (100%)
b1480	Perform upgrades and a sag study on the Corner – Layman 138 kV section of the Corner – Muskingum River 138 kV circuit		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1481	Perform a sag study on the West Lima – Eastown Road – Rockhill 138 kV line and replace the 138 kV risers at Rockhill station to increase the emergency rating	AEP (100%)
b1482	Perform a sag study for the Albion – Robison Park 138 kV line to increase its emergency rating	AEP (100%)
b1483	Sag study 1 mile of the Clinch River – Saltville 138 kV line and replace the risers and bus at Clinch River, Lebanon and Elk Garden Stations	
b1484	Perform a sag study on the Hacienda – Harper 138 kV line to increase the emergency rating	AEP (100%)
b1485	Perform a sag study on the Jackson Road – Concord 183 kV line to increase the emergency rating	AEP (100%)
b1486	The Matt Funk – Poages Mill – Starkey 138 kV line requires	AEP (100%)
b1487	Perform a sag study on the New Carlisle – Trail Creek 138 kV line to increase the emergency rating	AEP (100%)
b1488	Perform a sag study on the Olive – LaPorte Junction 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1489	A sag study must be performed for the 5.40 mile Tristate – Chadwick 138 kV line to determine if a higher emergency rating can be used	AEP (100%)
b1490.1	Establish a new 138/69 kV Butler Center station	AEP (100%)
b1490.2	Build a new 14 mile 138 kV line from Auburn station to Woods Road station VIA Butler Center station	AEP (100%)
b1490.3	Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer	AEP (100%)
b1490.4	Improve the switching arrangement at Kendallville station	AEP (100%)
b1491	Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line	AEP (100%)
b1492	Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR	AEP (100%)
b1493	Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating	AEP (100%)
b1494	Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to increase its emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1495	Add an additional 765/345 kV transformer at Baker Station	AEC (0.41%) / AEP (87.22%) / BGE (1.03%) / ComEd (3.38%) / Dayton (1.23%) / DL (1.46%) / DPL (0.54%) / JCPL (0.90%) / NEPTUNE (0.09%) / HTP (0.04%) / PECO (1.18%) / PEPCO (0.94%) / ECP** (0.04%) / PSEG (1.48%) / RE (0.06%)
b1496	Replace 138 kV bus and risers at Johnson Mountain Station	AEP (100%)
b1497	Replace 138 kV bus and risers at Leesville Station	AEP (100%)
b1498	Replace 138 kV risers at Wurno Station	AEP (100%)
b1499	Perform a sag study on Sporn A – Gavin 138 kV to determine if the emergency rating can be improved	AEP (100%)
b1500	The North East Canton – Wagenhals 138 kV circuit would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)
b1501	The Moseley – Reusens 138 kV circuit requires a sag study to determine if the emergency rating can be utilized to address a thermal loading issue for a category C3	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1502	Reconductor the Conesville East – Conesville Prep Plant Tap 138 kV section of the Conesville – Ohio Central to fix Reliability N-1-1 thermal overloads		AEP (100%)
b1659	Establish Sorenson 345/138 kV station as a 765/345 kV station		AEP (93.61%) / ATSI (2.99%) / ComEd (2.07%) / HTP (0.03%) / PENELEC (0.31%) / ECP** (0.03%) / PSEG (0.92%) / RE (0.04%)
b1659.1	Replace Sorenson 138 kV breaker 'L1'		AEP (100%)
b1659.2	Replace Sorenson 138 kV breaker 'L2' breaker		AEP (100%)
b1659.3	Replace Sorenson 138 kV breaker 'M1'		AEP (100%)
b1659.4	Replace Sorenson 138 kV breaker 'M2'		AEP (100%)
b1659.5	Replace Sorenson 138 kV breaker 'N1'		AEP (100%)
b1659.6	Replace Sorenson 138 kV breaker 'N2'		AEP (100%)
b1659.7	Replace Sorenson 138 kV breaker 'O1'		AEP (100%)
b1659.8	Replace Sorenson 138 kV breaker 'O2'		AEP (100%)
b1659.9	Replace Sorenson 138 kV breaker 'M'		AEP (100%)
b1659.10	Replace Sorenson 138 kV breaker 'N'		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1659.11	Replace Sorenson 138 kV breaker 'O'	AEP (100%)
b1659.12	Replace McKinley 138 kV breaker 'L1'	AEP (100%)
b1659.13	Establish 765 kV yard at Sorenson and install four 765 kV breakers	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (76.55%) / Dayton (7.81%) / DEOK (15.64%)</u>
b1659.14	Build approximately 14 miles of 765 kV line from existing Dumont - Marysville line	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (64.15%) / ATSI (18.55%) / ComEd (4.15%) / Dayton (6.57%) / DL (6.27%) / EKPC (0.31%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1660	Install a 765/500 kV transformer at Cloverdale	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (57.93%) / DEOK (0.07%) / Dominion (0.12%) / EKPC (0.02%) / PEPCO (41.86%)</u>
b1661	Install a 765 kV circuit breaker at Wyoming station	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (100%)</u>
b1662	Rebuild 4 miles of 46 kV line to 138 kV from Pemberton to Cherry Creek	AEP (100%)
b1662.1	Circuit Breakers are installed at Cherry Creek (facing Pemberton) and at Pemberton (facing Tams Mtn. and Cherry Creek)	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1662.2	Install three 138 kV breakers at Grandview Station (facing Cherry Creek, Hinton, and Bradley Stations)	AEP (100%)
b1662.3	Remove Sullivan Switching Station (46 kV)	AEP (100%)
b1663	Install a new 765/138 kV transformer at Jackson Ferry substation	AEP (100%)
b1663.1	Establish a new 10 mile double circuit 138 kV line between Jackson Ferry and Wythe	AEP (100%)
b1663.2	Install 2 765 kV circuit breakers, breaker disconnect switches and associated bus work for the new 765 kV breakers, and new relays for the 765 kV breakers at Jackson's Ferry	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (100%)</u>
b1664	Install switched capacitor banks at Kenwood 138 kV stations	AEP (100%)
b1665	Install a second 138/69 kV transformer at Thelma station	AEP (100%)
b1665.1	Construct a single circuit 69 kV line from West Paintsville to the new Paintsville station	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1665.2	Install new 7.2 MVAR, 46 kV bank at Kenwood Station	AEP (100%)
b1666	Build an 8 breaker 138 kV station tapping both circuits of the Fostoria - East Lima 138 kV line	AEP (90.65%) / Dayton (9.35%)
b1667	Establish Melmore as a switching station with both 138 kV circuits terminating at Melmore. Extend the double circuit 138 kV line from Melmore to Fremont Center	AEP (100%)
b1668	Revise the capacitor setting at Riverside 138 kV station	AEP (100%)
b1669	Capacitor setting changes at Ross 138 kV stations	AEP (100%)
b1670	Capacitor setting changes at Wooster 138 kV station	AEP (100%)
b1671	Install four 138 kV breakers in Danville area	AEP (100%)
b1676	Replace Natrium 138 kV breaker 'G (rehab)'	AEP (100%)
b1677	Replace Huntley 138 kV breaker '106'	AEP (100%)
b1678	Replace Kammer 138 kV breaker 'G'	AEP (100%)
b1679	Replace Kammer 138 kV breaker 'H'	AEP (100%)
b1680	Replace Kammer 138 kV breaker 'J'	AEP (100%)
b1681	Replace Kammer 138 kV breaker 'K'	AEP (100%)
b1682	Replace Kammer 138 kV breaker 'M'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1683	Replace Kammer 138 kV breaker 'N'	AEP (100%)
b1684	Replace Clinch River 138 kV breaker 'E1'	AEP (100%)
b1685	Replace Lincoln 138 kV breaker 'D'	AEP (100%)
b1687	Advance s0251.7 (Replace Corrid 138 kV breaker '104S')	AEP (100%)
b1688	Advance s0251.8 (Replace Corrid 138 kV breaker '104C')	AEP (100%)
b1712.1	Perform sag study on Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1712.2	Rebuild the Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1733	Perform a sag study of the Bluff Point - Jauy 138 kV line. Upgrade breaker, wavetrap, and risers at the terminal ends	AEP (100%)
b1734	Perform a sag study of Randolph - Hodgins 138 kV line. Upgrade terminal equipment	AEP (100%)
b1735	Perform a sag study of R03 - Magely 138 kV line. Upgrade terminal equipment	AEP (100%)
b1736	Perform a sag study of the Industrial Park - Summit 138 kV line	AEP (100%)
b1737	Sag study of Newcomerstown - Hillview 138 kV line. Upgrade -terminal equipment	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1738	Perform a sag study of the Wolf Creek - Layman 138 kV line. - Upgrade terminal equipment including a 138 kV breaker and wavetrapp	AEP (100%)
b1739	Perform a sag study of the Ohio Central - West Trinway 138 kV line	AEP (100%)
b1741	Replace Beatty 138 kV breaker '2C(IPP)'	AEP (100%)
b1742	Replace Beatty 138 kV breaker '1E'	AEP (100%)
b1743	Replace Beatty 138 kV breaker '2E'	AEP (100%)
b1744	Replace Beatty 138 kV breaker '3C'	AEP (100%)
b1745	Replace Beatty 138 kV breaker '2W'	AEP (100%)
b1746	Replace St. Claire 138 kV breaker '8'	AEP (100%)
b1747	Replace Cloverdale 138 kV breaker 'C'	AEP (100%)
b1748	Replace Cloverdale 138 kV breaker 'D1'	AEP (100%)
b1780	Install two 138kV breakers and two 138kV circuit switchers at South Princeton Station and one 138kV breaker and one 138kV circuit switcher at Switchback Station	AEP (100%)
b1781	Install three 138 kV breakers and a 138kV circuit switcher at Trail Fork Station in Pineville, WV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1782	Install a 46kV Moab at Montgomery Station facing Carbondale (on the London - Carbondale 46 kV circuit)	AEP (100%)
b1783	Add two 138 kV Circuit Breakers and two 138 kV circuit switchers on the Lonesome Pine - South Bluefield 138 kV line	AEP (100%)
b1784	Install a 52.8 MVAR capacitor bank at the Clifford 138 kV station	AEP (100%)
b1811.1	Perform a sag study of 4 miles of the Waterford - Muskingum line	AEP (100%)
b1811.2	Rebuild 0.1 miles of Waterford - Muskingum 345 kV with 1590 ACSR	AEP (100%)
b1812	Reconductor the AEP portion of the South Canton - Harmon 345 kV with 954 ACSR and upgrade terminal equipment at South Canton. Expected rating is 1800 MVA S/N and 1800 MVA S/E	AEP (100%)
b1817	Install (3) 345 kV circuit breakers at East Elkhart station in ring bus designed as a breaker and half scheme	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1818	Expand the Allen station by installing a second 345/138 kV transformer and adding four 138 kV exits by cutting in the Lincoln - Sterling and Milan - Timber Switch 138 kV double circuit tower line	AEP (88.30%) / ATSI (8.86%) / Dayton (2.84%)
b1819	Rebuild the Robinson Park - Sorenson 138 kV line corridor as a 345 kV double circuit line with one side operated at 345 kV and one side at 138 kV	AEP (87.18%) / ATSI (10.06%) / Dayton (2.76%)
b1859	Perform a sag study for Hancock - Cave Spring - Roanoke 138 kV circuit to reach new SE ratings of 272MVA (Cave Spring-Hancock), 205MVA (Cave Spring-Sunscape), 245MVA (ROANO2-Sunscape)	AEP (100%)
b1860	Perform a sag study on the Crooksville - Spencer Ridge section (14.3 miles) of the Crooksville-Poston-Strouds Run 138 kV circuit to see if any remedial action needed to reach the SE rating (175MVA)	AEP (100%)
b1861	Reconductor 0.83 miles of the Dale - West Canton 138 kV Tie-line and upgrade risers at West Canton 138 kV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1862	Perform a sag study on the Grant - Greentown 138 kV circuit and replace the relay CT at Grant 138 kV station to see if any remedial action needed to reach the new ratings of 251/286MVA	AEP (100%)
b1863	Perform a sag study of the Kammer - Wayman SW 138 kV line to see if any remedial action needed to reach the new SE rating of 284MVA	AEP (100%)
b1864.1	Add two additional 345/138 kV transformers at Kammer	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.2	Add second West Bellaire - Brues 138 kV circuit	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.3	Replace Kammer 138 kV breaker 'E'	AEP (100%)
b1865	Perform a sag study on the Kanawha - Carbondale 138 kV line to see if any remedial action needed to reach the new ratings of 251/335MVA	AEP (100%)
b1866	Perform a sag study on the Clinch River-Lock Hart-Dorton 138kV line,increase the Relay Compliance Trip Limit at Clinch River on the C.R.-Dorton 138kV line to 310 and upgrade the risers with 1590ACSR	AEP (100%)
b1867	Perform a sag study on the Newcomerstown - South Coshocton 138 kV line to see if any remedial action is needed to reach the new SE rating of 179MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1868	Perform sag study on the East Lima - new Liberty 138 kV line to see if any remedial action is needed to reach the new SE rating of 219MVA	AEP (100%)
b1869	Perform a sag study of the Ohio Central - South Coshocton 138 kV circuit to see if any remedial action needed to reach the new SE ratings of 250MVA	AEP (100%)
b1870	Replace the Ohio Central transformer #1 345/138/12 kV 450 MVA for a 345/138/34.5 kV 675 MVA transformer	AEP (68.16%) / ATSI (25.27%) / Dayton (3.88%) / PENELEC (1.59%) / DEOK (1.10%)
b1871	Perform a sag study on the Central - West Coshocton 138 kV line (improving the emergency rating of this line to 254 MVA)	AEP (100%)
b1872	Add a 57.6 MVA capacitor bank at East Elkhart 138 kv station in Indiana	AEP (100%)
b1873	Install two 138 kV circuit breakers at Cedar Creek Station and primary side circuit switcher on the 138/69/46 kV transformer	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1874	Install two 138 kV circuit breakers and one 138 kV circuit switcher at Magely 138 kV station in Indiana	AEP (100%)
b1875	Build 25 miles of new 138 kV line from Bradley Station through Tower 117 Station and terminating at McClung 138 kV station. Existing 69 kV distribution transformers will be replaced with 138 kV transformers	AEP (100%)
b1876	Install a 14.4 MVar capacitor bank at Capital Avenue (AKA Currant Road) 34.5 kV bus	AEP (100%)
b1877	Relocate 138 kV Breaker G to the West Kingsport - Industry Drive 138 kV line and Remove 138 kV MOAB	AEP (100%)
b1878	Perform a sag study on the Lincoln - Robinson Park 138 kV line (Improve the emergency rating to 244 MVA)	AEP (100%)
b1879	Perform a sag study on the Hansonville - Meadowview 138 kV line (Improve the emergency rating to 245 MVA)	AEP (100%)
b1880	Rebuild the 15 miles of the Moseley - Roanoke 138 kV line. This project would consist of rebuilding both circuits on the double circuit line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1881	Replace existing 600 Amp switches, station risers and increase the CT ratios associated with breaker 'G' at Sterling 138 kV Station. It will increase the rating to 296 MVA S/N and 384 MVA S/E	AEP (100%)
b1882	Perform a sag study on the Bluff Point - Randolph 138 kV line to see if any remedial action needed to reach the new SE rating of 255 MVA	AEP (100%)
b1883	Switch the breaker position of transformer #1 and SW Lima at East Lima 345 kV bus	AEP (100%)
b1884	Perform a sag study on Strawton station - Fisher Body - Deer Creek 138 kV line to see if any remedial action needed to reach the new SE rating of 250 MVA	AEP (100%)
b1887	Establish a new 138/69 kV source at Carrollton and construct two new 69 kV lines from Carrollton to tie into the Dennison - Miller SW 69 kV line and to East Dover 69 kV station respectively	AEP (100%)
b1888	Install a 69 kV line breaker at Blue Pennant 69 kV Station facing Bim Station and 14.4 MVar capacitor bank	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1889	Install a 43.2 MVAR capacitor bank at Hinton 138 kV station (APCO WV)	AEP (100%)
b1901	Rebuild the Ohio Central - West Trinway (4.84 miles) section of the Academia - Ohio Central 138 kV circuit. Upgrade the Ohio Central riser, Ohio Central switch and the West Trinway riser	AEP (100%)
b1904.1	Construct new 138/69 Michiana Station near Bridgman by tapping the new Carlisle - Main Street 138 kV and the Bridgman - Buchanan Hydro 69 kV line	AEP (100%)
b1904.2	Establish a new 138/12 kV New Galien station by tapping the Olive - Hickory Creek 138 kV line	AEP (100%)
b1904.3	Retire the existing Galien station and move its distribution load to New Galien station. Retire the Buchanan Hydro - New Carlisle 34.5 kV line	AEP (100%)
b1904.4	Implement an in and out scheme at Cook 69 kV by eliminating the Cook 69 kV tap point and by installing two new 69 kV circuit breakers	AEP (100%)
b1904.5	Rebuild the Bridgman - Cook 69 kV and the Derby - Cook 69 kV lines	AEP (100%)
b1946	Perform a sag study on the Brues – West Bellaire 138 kV line	AEP (100%)
b1947	A sag study of the Dequine - Meadowlake 345 kV line #1 line may improve the emergency rating to 1400 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1948	Establish a new 765/345 interconnection at Sporn. Install a 765/345 kV transformer at Mountaineer and build ¾ mile of 345 kV to Sporn	ATSI (61.08%) / DL (21.87%) / Dominion (13.97%) / PENELEC (3.08%)
b1949	Perform a sag study on the Grant Tap – Deer Creek 138 kV line and replace bus and risers at Deer Creek station	AEP (100%)
b1950	Perform a sag study on the Kammer – Ormet 138 kV line of the conductor section	AEP (100%)
b1951	Perform a sag study of the Maddox- Convoy 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1952	Perform a sag study of the Maddox – T130 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1953	Perform a sag study of the Meadowlake - Olive 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1954	Perform a sag study on the Milan - Harper 138 kV line and replace bus and switches at Milan Switch station	AEP (100%)
b1955	Perform a sag study of the R-049 - Tillman 138 kV line may improve the emergency rating to 245 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1956	Perform a sag study of the Tillman - Dawkins 138 kV line may improve the emergency rating to 245 MVA	AEP (100%)
b1957	Terminate Transformer #2 at SW Lima in a new bay position	AEP (69.41%) / ATSI (23.11%) / ECP** (0.17%) / HTP (0.19%) / PENELEC (2.42%) / PSEG (4.52%) / RE (0.18%)
b1958	Perform a sag study on the Brookside - Howard 138 kV line and replace bus and risers at AEP Howard station	AEP (100%)
b1960	Sag Study on 7.2 miles SE Canton-Canton Central 138kV ckt	AEP (100%)
b1961	Sag study on the Southeast Canton – Sunnyside 138kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1962	Add four 765 kV breakers at Kammer	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEP (100%)</p>
b1963	Build approximately 1 mile of circuit comprising of 2-954 ACSR to get the rating of Waterford-Muskinum 345 kV higher	AEP (100%)
b1970	Reconductor 13 miles of the Kammer – West Bellaire 345kV circuit	APS (33.51%) / ATSI (32.21%) / DL (18.64%) / Dominion (6.01%) / ECP** (0.10%) / HTP (0.11%) / JCPL (1.68%) / Neptune* (0.18%) / PENELEC (4.58%) / PSEG (2.87%) / RE (0.11%)
b1971	Perform a sag study to improve the emergency rating on the Bridgville – Chandlersville 138 kV line	AEP (100%)
b1972	Replace disconnect switch on the South Canton 765/345 kV transformer	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1973	Perform a sag study to improve the emergency rating on the Carrollton – Sunnyside 138 kV line	AEP (100%)
b1974	Perform a sag study to improve the emergency rating on the Bethel Church – West Dover 138 kV line	AEP (100%)
b1975	Replace a switch at South Millersburg switch station	AEP (100%)
b2017	Reconductor or rebuild Sporn - Waterford - Muskingum River 345 kV line	ATSI (37.04%) / AEP (34.35%) / DL (10.41%) / Dominion (6.19%) / APS (3.94%) / PENELEC (3.09%) / JCPL (1.39%) / Dayton (1.20%) / Neptune* (0.14%) / HTP (0.09%) / ECP** (0.08%) / PSEG (2.00%) / RE (0.08%)
b2018	Loop Conesville - Bixby 345 kV circuit into Ohio Central	ATSI (58.58%) / AEP (14.16%) / APS (12.88%) / DL (7.93%) / PENELEC (5.73%) / Dayton (0.72%)
b2019	Establish Burger 345/138 kV station	AEP (93.74%) / APS (4.40%) / DL (1.11%) / ATSI (0.74%) / PENELEC (0.01%)
b2020	Rebuild Amos - Kanawah River 138 kV corridor	AEP (88.39%) / APS (7.12%) / ATSI (2.89%) / DEOK (1.58%) / PEPCO (0.02%)
b2021	Add 345/138 transformer at Sporn, Kanawah River & Muskingum River stations	AEP (91.92%) / DEOK (3.60%) / APS (2.19%) / ATSI (1.14%) / DL (1.08%) / PEPCO (0.04%) / BGE (0.03%)
b2021.1	Replace Kanawah 138 kV breaker 'L'	AEP (100%)
b2021.2	Replace Muskingum 138 kV breaker 'HG'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2021.3	Replace Muskingum 138 kV breaker 'HJ'	AEP (100%)
b2021.4	Replace Muskingum 138 kV breaker 'HE'	AEP (100%)
b2021.5	Replace Muskingum 138 kV breaker 'HD'	AEP (100%)
b2021.6	Replace Muskingum 138 kV breaker 'HF'	AEP (100%)
b2021.7	Replace Muskingum 138 kV breaker 'HC'	AEP (100%)
b2021.8	Replace Sporn 138 kV breaker 'D1'	AEP (100%)
b2021.9	Replace Sporn 138 kV breaker 'D2'	AEP (100%)
b2021.10	Replace Sporn 138 kV breaker 'F1'	AEP (100%)
b2021.11	Replace Sporn 138 kV breaker 'F2'	AEP (100%)
b2021.12	Replace Sporn 138 kV breaker 'G'	AEP (100%)
b2021.13	Replace Sporn 138 kV breaker 'G2'	AEP (100%)
b2021.14	Replace Sporn 138 kV breaker 'N1'	AEP (100%)
b2021.15	Replace Kanawah 138 kV breaker 'M'	AEP (100%)
b2022	Terminate Tristate - Kyger Creek 345 kV line at Sporn	AEP (97.99%) / DEOK (2.01%)
b2027	Perform a sag study of the Tidd - Collier 345 kV line	AEP (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2028	Perform a sag study on East Lima - North Woodcock 138 kV line to improve the rating	AEP (100%)
b2029	Perform a sag study on Bluebell - Canton Central 138 kV line to improve the rating	AEP (100%)
b2030	Install 345 kV circuit breakers at West Bellaire	AEP (100%)
b2031	Sag study on Tilton - W. Bellaire section 1 (795 ACSR), about 12 miles	AEP (100%)
b2032	Rebuild 138 kV Elliot tap - Poston line	ATSI (73.02%) / Dayton (19.39%) / DL (7.59%)
b2033	Perform a sag study of the Brues - W. Bellaire 138 kV line	AEP (100%)
b2046	Adjust tap settings for Muskingum River transformers	AEP (100%)
b2047	Replace relay at Greenlawn	AEP (100%)
b2048	Replace both 345/138 kV transformers with one bigger transformer	AEP (92.49%) / Dayton (7.51%)
b2049	Replace relay	AEP (100%)
b2050	Perform sag study	AEP (100%)
b2051	Install 3 138 kV breakers and a circuit switcher at Dorton station	AEP (100%)
b2052	Replace transformer	AEP (67.17%) / ATSI (27.37%) / Dayton (3.73%) / PENELEC (1.73%)
b2054	Perform a sag study of Sporn - Rutland 138 kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2069	Replace George Washington 138 kV breaker 'A' with 63kA rated breaker	AEP (100%)
b2070	Replace Harrison 138 kV breaker '6C' with 63kA rated breaker	AEP (100%)
b2071	Replace Lincoln 138 kV breaker 'L' with 63kA rated breaker	AEP (100%)
b2072	Replace Natrum 138 kV breaker 'T' with 63kA rated breaker	AEP (100%)
b2073	Replace Darrah 138 kV breaker 'B' with 63kA rated breaker	AEP (100%)
b2074	Replace Wyoming 138 kV breaker 'G' with 80kA rated breaker	AEP (100%)
b2075	Replace Wyoming 138 kV breaker 'G1' with 80kA rated breaker	AEP (100%)
b2076	Replace Wyoming 138 kV breaker 'G2' with 80kA rated breaker	AEP (100%)
b2077	Replace Wyoming 138 kV breaker 'H' with 80kA rated breaker	AEP (100%)
b2078	Replace Wyoming 138 kV breaker 'H1' with 80kA rated breaker	AEP (100%)
b2079	Replace Wyoming 138 kV breaker 'H2' with 80kA rated breaker	AEP (100%)
b2080	Replace Wyoming 138 kV breaker 'J' with 80kA rated breaker	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2081	Replace Wyoming 138 kV breaker 'J1' with 80kA rated breaker	AEP (100%)
b2082	Replace Wyoming 138 kV breaker 'J2' with 80kA rated breaker	AEP (100%)
b2083	Replace Natrum 138 kV breaker 'K' with 63kA rated breaker	AEP (100%)
b2084	Replace Tanner Creek 345 kV breaker 'P' with 63kA rated breaker	AEP (100%)
b2085	Replace Tanner Creek 345 kV breaker 'P2' with 63kA rated breaker	AEP (100%)
b2086	Replace Tanner Creek 345 kV breaker 'Q1' with 63kA rated breaker	AEP (100%)
b2087	Replace South Bend 138 kV breaker 'T' with 63kA rated breaker	AEP (100%)
b2088	Replace Tidd 138 kV breaker 'L' with 63kA rated breaker	AEP (100%)
b2089	Replace Tidd 138 kV breaker 'M2' with 63kA rated breaker	AEP (100%)
b2090	Replace McKinley 138 kV breaker 'A' with 40kA rated breaker	AEP (100%)
b2091	Replace West Lima 138 kV breaker 'M' with 63kA rated breaker	AEP (100%)
b2092	Replace George Washington 138 kV breaker 'B' with 63kA rated breaker	AEP (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.



**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2093	Replace Turner 138 kV breaker 'W' with 63kA rated breaker		AEP (100%)
b2135	Build a new 138 kV line from Falling Branch to Merrimac and add a 138/69 kV transformer at Merrimac Station		AEP (100%)
b2160	Add a fourth circuit breaker to the station being built for the U4-038 project (Conelley), rebuild U4-038 - Grant Tap line as double circuit tower line		AEP (100%)
b2161	Rebuild approximately 20 miles of the Allen - S073 double circuit 138 kV line (with one circuit from Allen - Tillman - Timber Switch - S073 and the other circuit from Allen - T-131 - S073) utilizing 1033 ACSR		AEP (100%)
b2162	Perform a sag study to improve the emergency rating of the Belpre - Degussa 138 kV line		AEP (100%)
b2163	Replace breaker and wavetrapp at Jay 138 kV station		AEP (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

## SCHEDULE 12 – APPENDIX

### (20) Virginia Electric and Power Company

Required Transmission Enhancements		Annual Revenue Requirement***	Responsible Customer(s)
b0217	Upgrade Mt. Storm - Doubs 500kV		<u><b>Load-Ratio Share Allocation:</b></u> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<u><b>DFAX Allocation:</b></u> <u>APS (22.34%) / BGE (11.58%) /</u> <u>Dominion (52.51%) / PEPCO (13.57%)</u>
b0222	Install 150 MVAR capacitor at Loudoun 500 kV		<u><b>Load-Ratio Share Allocation:</b></u> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<u><b>DFAX Allocation:</b></u> <u>Dominion (88.62%) / PEPCO (11.38%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

\*\*\* The Annual Revenue Requirement for all Virginia Electric and Power Company projects in this Section 20 shall be as specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B.

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0223	Install 150 MVAR capacitor at Asburn 230 kV		Dominion (100%)
b0224	Install 150 MVAR capacitor at Dranesville 230 kV		Dominion (100%)
b0225	Install 33 MVAR capacitor at Possum Pt. 115 kV		Dominion (100%)
b0226	Install 500/230 kV transformer at Clifton and Clifton 500 kV 150 MVAR capacitor	As specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B	APS (3.69%) / BGE (3.54%) / Dominion (85.73%) / PEPCO (7.04%)
b0227	Install 500/230 kV transformer at Bristers; build new 230 kV Bristers-Gainsville circuit, upgrade two Loudoun-Brambleton circuits		AEC (0.71%) / APS (3.35%) / BGE (10.92%) / ConEd (0.10%) / DPL (1.66%) / Dominion (67.31%) / ME (0.89%) / PECO (2.33%) / PEPCO (12.19%) / PPL (0.54%)
b0227.1	Loudoun Sub – upgrade 6-230 kV breakers		Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0231	Install 500 kV breakers & 500 kV bus work at Suffolk		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>Dominion (100%)</u>
b0231.2	Install 500/230 kV Transformer, 230 kV breakers, & 230 kV bus work at Suffolk		Dominion (100%)
b0232	Install 150 MVAR capacitor at Lynnhaven 230 kV		Dominion (100%)
b0233	Install 150 MVAR capacitor at Landstown 230 kV		Dominion (100%)
b0234	Install 150 MVAR capacitor at Greenwich 230 kV		Dominion (100%)
b0235	Install 150 MVAR capacitor at Fentress 230 kV		Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0307	Reconductor Endless Caverns – Mt. Jackson 115 kV		Dominion (100%)
b0308	Replace L breaker and switches at Endless Caverns 115 kV		Dominion (100%)
b0309	Install SPS at Earleys 115 kV		Dominion (100%)
b0310	Reconductor Club House – South Hill and Chase City – South Hill 115 kV		Dominion (100%)
b0311	Reconductor Idylwood to Arlington 230 kV		Dominion (100%)
b0312	Reconductor Gallows to Ox 230 kV		Dominion (100%)
b0325	Install a 2 <sup>nd</sup> Everetts 230/115 kV transformer		Dominion (100%)
b0326	Uprate/resag Remington-Brandywine-Culppr 115 kV		Dominion (100%)
b0327	Build 2 <sup>nd</sup> Harrisonburg – Valley 230 kV		APS (19.79%) / Dominion (76.18%) / PEPCO (4.03%)
b0328.1	Build new Meadow Brook – Loudoun 500 kV circuit (30 of 50 miles)		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> Dominion (88.62%) / PEPCO (11.38%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.3	Upgrade Mt. Storm 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>
b0328.4	Upgrade Loudoun 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (88.62%) / PEPCO (11.38%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit		<b><u>Load Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>Dominion (100%)</u>
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit		Dominion (100%)††
b0329.1	Replace Thole Street 115 kV breaker ‘48T196’		Dominion (100%)
b0329.2	Replace Chesapeake 115 kV breaker ‘T242’		Dominion (100%)
b0329.3	Replace Chesapeake 115 kV breaker ‘8722’		Dominion (100%)
b0329.4	Replace Chesapeake 115 kV breaker ‘16422’		Dominion (100%)
b0330	Install Crewe 115 kV breaker and shift load from line 158 to 98		Dominion (100%)
b0331	Upgrade/resag Shell Bank – Whealton 115 kV (Line 165)		Dominion (100%)

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†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0332	Uprate/resag Chesapeake – Cradock 115 kV	Dominion (100%)
b0333	Replace wave trap on Elmont – Replace (Line #231)	Dominion (100%)
b0334	Uprate/resag Iron Bridge-Walmsley-Southwest 230 kV	Dominion (100%)
b0335	Build Chase City – Clarksville 115 kV	Dominion (100%)
b0336	Reconductor one span of Chesapeake – Dozier 115 kV close to Dozier substation	Dominion (100%)
b0337	Build Lexington 230 kV ring bus	Dominion (100%)
b0338	Replace Gordonsville 230/115 kV transformer for larger one	Dominion (100%)
b0339	Install Breaker at Doms 230 kV Sub	Dominion (100%)
b0340	Reconductor one span Peninsula – Magruder 115 kV close to Magruder substation	Dominion (100%)
b0341	Install a breaker at Northern Neck 115 kV	Dominion (100%)
b0342	Replace Trowbridge 230/115 kV transformer	Dominion (100%)
b0403	2 <sup>nd</sup> Doms 500/230 kV transformer addition	APS (3.35%) / BGE (4.22%) / DPL (1.10%) / Dominion (83.94%) / PEPCO (7.39%)



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0412	Retension Pruntytown – Mt. Storm 500 kV to a 3502 MVA rating	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  APS (46.82%) / PEPCO (53.18%)</p>
b0450	Install 150 MVAR Capacitor at Fredricksburg 230 kV	Dominion (100%)
b0451	Install 25 MVAR Capacitor at Somerset 115 kV	Dominion (100%)
b0452	Install 150 MVAR Capacitor at Northwest 230 kV	Dominion (100%)
b0453.1	Convert Remington – Sowego 115 kV to 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.2	Add Sowego – Gainesville 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.3	Add Sowego 230/115 kV transformer	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0454	Reconductor 2.4 miles of Newport News – Chuckatuck 230 kV	Dominion (100%)

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\*\* East Coast Power, L.L.C.

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0455	Add 2 <sup>nd</sup> Endless Caverns 230/115 kV transformer	APS (32.70%) / BGE (7.01%) / DPL (1.80%) / Dominion (50.82%) / PEPCO (7.67%)
b0456	Reconductor 9.4 miles of Edinburg – Mt. Jackson 115 kV	APS (33.69%) / BGE (12.18%) / Dominion (40.08%) / PEPCO (14.05%)
b0457	Replace both wave traps on Doods – Lexington 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>DEOK (1.12%) / Dominion (85.91%) / EKPC (0.33%) / PEPCO (12.64%)</u>
b0467.2	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.66%) / BGE (22.09%) / ConEd (0.18%) / DPL (3.69%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.53%) / PEPCO (41.78%) / PPL (2.07%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.6	Replace Mount Storm 500 kV breaker 55072		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0492.7	Replace Mount Storm 500 kV breaker 55172		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.8	Replace Mount Storm 500 kV breaker H1172-2		<p style="color: red; text-decoration: underline;"><b>Load-Ratio Share Allocation:</b></p> <p>AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p style="color: red; text-decoration: underline;"><b>DFAX Allocation:</b></p> <p><u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0492.9	Replace Mount Storm 500 kV breaker G2T550		<p style="color: red; text-decoration: underline;"><b>Load-Ratio Share Allocation:</b></p> <p>AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p style="color: red; text-decoration: underline;"><b>DFAX Allocation:</b></p> <p><u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.10	Replace Mount Storm 500 kV breaker G2T554		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0492.11	Replace Mount Storm 500 kV breaker G1T551		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.12	Upgrade nameplate rating of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0512.5	Advance n0716 (Ox - Replace 230kV breaker L242)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.6	Advance n0717 (Possum Point - Replace 230kV breaker SC192)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0583	Install dual primary protection schemes on Gosport lines 62 and 51 at the remote terminals (Chesapeake on the 62 line and Reeves Ave on the 51 line)	Dominion (100%)
b0756	Install a second 500/115 kV autotransformer at Chancellor 500 kV	Dominion (100%)

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**Virginia Electric and Power Company (cont.)**

<b><u>Required Transmission Enhancements</u></b>	<b><u>Annual Revenue Requirement</u></b>	<b><u>Responsible Customer(s)</u></b>
b0756.1	Install two 500 kV breakers at Chancellor 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <b><u>Dominion (100%)</u></b>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0757	Reconductor one mile of Chesapeake – Reeves Avenue 115 kV line	Dominion (100%)
b0758	Install a second Fredericksburg 230/115 kV autotransformer	Dominion (100%)
b0760	Build 115 kV line from Kitty Hawk to Colington 115 kV (Colington on the existing line and Nag's Head and Light House DP on new line)	Dominion (100%)
b0761	Install a second 230/115 kV transformer at Possum Point	Dominion (100%)
b0762	Build a new Elko station and transfer load from Turner and Providence Forge stations	Dominion (100%)
b0763	Rebuild 17.5 miles of the line for a new summer rating of 262 MVA	Dominion (100%)
b0764	Increase the rating on 2.56 miles of the line between Greenwich and Thompson Corner; new rating to be 257 MVA	Dominion (100%)
b0765	Add a second Bull Run 230/115 kV autotransformer	Dominion (100%)
b0766	Increase the rating of the line between Loudoun and Cedar Grove to at least 150 MVA	Dominion (100%)
b0767	Extend the line from Old Church – Chickahominy 230 kV	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0768	Loop line #251 Idylwood – Arlington into the GIS sub	Dominion (100%)
b0769	Re-tension 15 miles of the line for a new summer rating of 216 MVA	Dominion (100%)
b0770	Add a second 230/115 kV autotransformer at Lanexa	Dominion (100%)
b0770.1	Replace Lanexa 115 kV breaker '8532'	Dominion (100%)
b0770.2	Replace Lanexa 115 kV breaker '9232'	Dominion (100%)
b0771	Build a parallel Chickahominy – Lanexa 230 kV line	Dominion (100%)
b0772	Install a second Elmont 230/115 kV autotransformer	Dominion (100%)
b0772.1	Replace Elmont 115 kV breaker '7392'	Dominion (100%)
b0774	Install a 33 MVAR capacitor at Bremo 115 kV	Dominion (100%)
b0775	Reconductor the Greenwich – Virginia Beach line to bring it up to a summer rating of 261 MVA; Reconductor the Greenwich – Amphibious Base line to bring it up to 291 MVA	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0776	Re-build Trowbridge – Winfall 115 kV	Dominion (100%)
b0777	Terminate the Thelma – Carolina 230 kV circuit into Lakeview 230 kV	Dominion (100%)
b0778	Install 29.7 MVAR capacitor at Lebanon 115 kV	Dominion (100%)
b0779	Build a new 230 kV line from Yorktown to Hayes but operate at 115 kV initially	Dominion (100%)
b0780	Reconductor Chesapeake – Yadkin 115 kV line	Dominion (100%)
b0781	Reconductor and replace terminal equipment on line 17 and replace the wave trap on line 88	Dominion (100%)
b0782	Install a new 115 kV capacitor at Dupont Waynesboro substation	Dominion (100%)
b0784	Replace wave traps on North Anna to Ladysmith 500 kV	<u><b>Load-Ratio Share Allocation:</b></u> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<u><b>DFAX Allocation:</b></u> <u>Dominion (100%)</u>
b0785	Rebuild the Chase City – Crewe 115 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0786	Reconductor the Moran DP – Crewe 115 kV segment	Dominion (100%)
b0787	Upgrade the Chase City – Twitty’s Creek 115 kV segment	Dominion (100%)
b0788	Reconductor the line from Farmville – Pamplin 115 kV	Dominion (100%)
b0793	Close switch 145T183 to network the lines. Rebuild the section of the line #145 between Possum Point – Minnieville DP 115 kV	Dominion (100%)
b0815	Replace Elmont 230 kV breaker '22192'	Dominion (100%)
b0816	Replace Elmont 230 kV breaker '21692'	Dominion (100%)
b0817	Replace Elmont 230 kV breaker '200992'	Dominion (100%)
b0818	Replace Elmont 230 kV breaker '2009T2032'	Dominion (100%)
b0837	At Mt. Storm, replace the existing MOD on the 500 kV side of the transformer with a circuit breaker	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPSCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0888	Replace Loudoun 230 kV Cap breaker 'SC352'		Dominion (100%)
b0892	Replace Chesapeake 115 kV breaker SX522		Dominion (100%)
b0893	Replace Chesapeake 115 kV breaker T202		Dominion (100%)
b0894	Replace Possum Point 115 kV breaker SX-32		Dominion (100%)
b0895	Replace Possum Point 115 kV breaker L92-1		Dominion (100%)
b0896	Replace Possum Point 115 kV breaker L92-2		Dominion (100%)
b0897	Replace Suffolk 115 kV breaker T202		Dominion (100%)
b0898	Replace Peninsula 115 kV breaker SC202		Dominion (100%)
b0921	Reconductor Brambleton - Cochran Mill 230 kV line with 201 Yukon conductor		Dominion (100%)
b0923	Install 50-100 MVAR variable reactor banks at Carson 230 kV		Dominion (100%)
b0924	Install 50-100 MVAR variable reactor banks at Doods 230 kV		Dominion (100%)
b0925	Install 50-100 MVAR variable reactor banks at Garrisonville 230 kV		Dominion (100%)
b0926	Install 50-100 MVAR variable reactor banks at Hamilton 230 kV		Dominion (100%)
b0927	Install 50-100 MVAR variable reactor banks at Yadkin 230 kV		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0928	Install 50-100 MVAR variable reactor banks at Carolina, Doods, Everetts, Idylwood, N. Alexandria, N. Anna, Suffolk and Valley 230 kV substations	Dominion (100%)
b1056	Build a 2nd Shawboro – Elizabeth City 230kV line	Dominion (100%)
b1058	Add a third 230/115 kV transformer at Suffolk substation	Dominion (100%)
b1058.1	Replace Suffolk 115 kV breaker 'T122' with a 40 kA breaker	Dominion (100%)
b1058.2	Convert Suffolk 115 kV straight bus to a ring bus for the three 230/115 kV transformers and three 115 kV lines	Dominion (100%)
b1071	Rebuild the existing 115 kV corridor between Landstown - Va Beach Substation for a double circuit arrangement (230 kV & 115 kV)	Dominion (100%)
b1076	Replace existing North Anna 500-230kV transformer with larger unit	Dominion (100%)
b1087	Replace Cannon Branch 230-115 kV with larger transformer	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1088	Build new Radnor Heights Sub, add new underground circuit from Ballston - Radnor Heights, Tap the Glebe - Davis line and create circuits from Davis - Radnor Heights and Glebe - Radnor Heights		Dominion (100%)
b1089	Install 2nd Burke to Sideburn 230 kV underground cable		Dominion (100%)
b1090	Install a 150 MVAR 230 kV capacitor and one 230 kV breaker at Northwest		Dominion (100%)
b1095	Reconductor Chase City 115 kV bus and add a new tie breaker		Dominion (100%)
b1096	Construct 10 mile double ckt. 230kV tower line from Loudoun to Middleburg		Dominion (100%)
b1102	Replace Bremo 115 kV breaker '9122'		Dominion (100%)
b1103	Replace Bremo 115 kV breaker '822'		Dominion (100%)
b1172	Build a 4-6 mile long 230 kV line from Hopewell to Bull Hill (Ft Lee) and install a 230-115 kV Tx		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1188	Build new Brambleton 500 kV three breaker ring bus connected to the Loudoun to Pleasant View 500 kV line	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  Dominion (100%)</p>
b1188.1	Replace Loudoun 230 kV breaker '200852' with a 63 kA breaker	Dominion (100%)
b1188.2	Replace Loudoun 230 kV breaker '2008T2094' with a 63 kA breaker	Dominion (100%)
b1188.3	Replace Loudoun 230 kV breaker '204552' with a 63 kA breaker	Dominion (100%)
b1188.4	Replace Loudoun 230 kV breaker '209452' with a 63 kA breaker	Dominion (100%)
b1188.5	Replace Loudoun 230 kV breaker 'WT2045' with a 63 kA breaker	Dominion (100%)
b1188.6	Install one 500/230 kV transformer and two 230 kV breakers at Brambleton	AEC (0.22%) / BGE (7.90%) / DPL (0.59%) / Dominion (75.58%) / ME (0.22%) / PECO (0.73%) / PEPCO (14.76%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1224	Install 2nd Clover 500/230 kV transformer and a 150 MVar capacitor		BGE (7.56%) / DPL (1.03%) / Dominion (78.21%) / ME (0.77%) / PECO (1.39%) / PEPCO (11.04%)
b1225	Replace Yorktown 115 kV breaker 'L982-1'		Dominion (100%)
b1226	Replace Yorktown 115 kV breaker 'L982-2'		Dominion (100%)
b1279	Line #69 Uprate – Increase rating on Locks – Purdy 115 kV to serve additional load at the Reams delivery point		Dominion (100%)
b1306	Reconfigure 115 kV bus at Endless Caverns substation such that the existing two 230/115 kV transformers at Endless Caverns operate in		Dominion (100%)
b1307	Install a 2nd 230/115 kV transformer at Northern Neck Substation		Dominion (100%)
b1308	Improve LSE's power factor in zone to .973 PF, adjust LTC's at Gordonsville and Remington, move existing shunt capacitor banks		Dominion (100%)
b1309	Install a 230 kV line from Lakeside to Northwest utilizing the idle line and 60 line ROW's and reconductor the existing 221 line between Elmont and Northwest		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1310	Install a 115 kV breaker at Broadnax substation on the South Hill side of Broadnax	Dominion (100%)
b1311	Install a 230 kV 3000 amp breaker at Cranes Corner substation to sectionalize the 2104 line into two lines	Dominion (100%)
b1312	Loop the 2054 line in and out of Hollymeade and place a 230 kV breaker at Hollymeade. This creates two lines: Charlottesville - Hollymeade	Dominion (100%)
b1313	Resag wire to 125C from Chesterfield – Shockoe and replace line switch 1799 with 1200 amp switch. The new rating would be 231 MVA.	Dominion (100%)
b1314	Rebuild the 6.8 mile line #100 from Chesterfield to Harrowgate 115 kV for a minimum 300 MBA rating	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1315	Convert line #64 Trowbridge to Winfall to 230 kV and install a 230 kV capacitor bank at Winfall		Dominion (100%)
b1316	Rebuild 10.7 miles of 115 kV line #80, Battleboro – Heartsease DP		Dominion (100%)
b1317	LSE load power factor on the #47 line will need to meet MOA requirements of .973 in 2015 to further resolve this issue through at least 2019		Dominion (100%)
b1318	Install a 115 kV bus tie breaker at Acca substation between the Line #60 and Line #95 breakers		Dominion (100%)
b1319	Resag line #222 to 150 C and upgrade any associated equipment to a 2000A rating to achieve a 706 MVA summer line rating		Dominion (100%)
b1320	Install a 230 kV, 150 MVAR capacitor bank at Southwest substation		Dominion (100%)
b1321	Build a new 230 kV line North Anna – Oak Green and install a 224 MVA 230/115 kV transformer at Oak Green		BGE (0.85%) / Dominion (97.96%) / PEPCO (1.19%)
b1322	Rebuild the 39 Line (Dooms – Sherwood) and the 91 Line (Sherwood – Bremono)		Dominion (100%)
b1323	Install a 224 MVA 230/115 kV transformer at Staunton. Rebuild the 115 kV line #43 section Staunton - Verona		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1324	Install a 115 kV capacitor bank at Oak Ridge. Install a capacitor bank at New Bohemia. Upgrade 230/34.5 kV transformer #3 at Kings Fork	Dominion (100%)
b1325	Rebuild 15 miles of line #2020 Winfall – Elizabeth City with a minimum 900 MVA rating	Dominion (100%)
b1326	Install a third 168 MVA 230/115 kV transformer at Kitty Hawk with a normally open 230 kV breaker and a low side 115 kV breaker	Dominion (100%)
b1327	Rebuild the 20 mile section of line #22 between Kerr Dam – Eatons Ferry substations	Dominion (100%)
b1328	Uprate the 3.63 mile line section between Possum and Dumfries substations, replace the 1600 amp wave trap at Possum Point	AEC (0.66%) / APS (3.59%) / DPL (0.91%) / Dominion (92.94%) / PECO (1.90%)
b1329	Install line-tie breakers at Sterling Park substation and BECO substation	Dominion (100%)
b1330	Install a five breaker ring bus at the expanded Dulles substation to accommodate the existing Dulles Arrangement and support the Metrorail	Dominion (100%)
b1331	Build a 230 kV line from Shawboro to Aydlett tap and connect Aydlett to the new line	Dominion (100%)
b1332	Build Cannon Branch to Nokesville 230 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1333	Advance n1728 (Replace Possum Point 230 kV breaker H9T237 with an 80 kA breaker)		Dominion (100%)
b1334	Advance n1748 (Replace Ox 230 kV breaker 22042 with a 63 kA breaker)		Dominion (100%)
b1335	Advance n1749 (Replace Ox 230 kV breaker 220T2603 with a 63 kA breaker)		Dominion (100%)
b1336	Advance n1750 (Replace Ox 230 kV breaker 24842 with a 63 kA breaker)		Dominion (100%)
b1337	Advance n1751 (Replace Ox 230 kV breaker 248T2013 with a 63 kA breaker)		Dominion (100%)
b1503.1	Loop Line #2095 in and out of Waxpool approximately 1.5 miles		Dominion (100%)
b1503.2	Construct a new 230kV line from Brambleton to BECO Substation of approximately 11 miles with approximately 10 miles utilizing the vacant side of existing Line #2095 structures		Dominion (100%)
b1503.3	Install a one 230 kV breaker, Future 230 kV ring-bus at Waxpool Substation		Dominion (100%)
b1503.4	The new Brambleton - BECO line will feed Shellhorn Substation load and Greenway TX's #2&3 load		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1506.1	At Gainesville Substation, create two 115 kV straight-buses with a normally open tie-breaker	Dominion (100%)
b1506.2	Upgrade Line 124 (radial from Loudoun) to a minimum continuous rating of 500 MVA and network it into the 115 kV bus feeding NOVEC's DP at Gainesville	Dominion (100%)
b1506.3	Install two additional 230 kV breakers in the ring at Gainesville (may require substation expansion) to accommodate conversion of NOVEC's Gainesville to Wheeler line	Dominion (100%)
b1506.4	Convert NOVEC's Gainesville-Wheeler line from 115 kV to 230 kV (will require Gainesville DP Upgrade replacement of three transformers total at Atlantic and Wheeler Substations)	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1507	Rebuild Mt Storm – Doubs 500 kV		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>APS (22.34%) / BGE (11.58%) /</u> <u>Dominion (52.51%) / PEPCO</u> <u>(13.57%)</u>
b1508.1	Build a 2nd 230 kV Line Harrisonburg to Endless Caverns		APS (37.05%) / Dominion (62.95%)
b1508.2	Install a 3rd 230-115 kV Tx at Endless Caverns		APS (37.05%) / Dominion (62.95%)
b1508.3	Upgrade a 115 kV shunt capacitor banks at Merck and Edinburg		APS (37.05%) / Dominion (62.95%)
b1536	Advance n1752 (Replace OX 230 breaker 24342 with an (63kA breaker)		Dominion (100%)
b1537	Advance n1753 (Replace OX 230 breaker 243T2097 with an 63kA breaker)		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1538	Replace Loudoun 230 kV breaker '29552'	Dominion (100%)
b1571	Replace Acca 115 kV breaker '6072' with 40 kA	Dominion (100%)
b1647	Upgrade the name plate rating at Morrisville 500kV breaker 'H1T573' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%) /  EKPC (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>Dominion (100%)</u></b></p>
b1648	Upgrade name plate rating at Morrisville 500kV breaker 'H2T545' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%) /  EKPC (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>Dominion (100%)</u></b></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1649	Replace Morrisville 500kV breaker 'H1T580' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1650	Replace Morrisville 500kV breaker 'H2T569' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1651	Replace Loudoun 230kV breaker '295T2030' with 63kA breaker	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1652	Replace Ox 230kV breaker '209742' with 63kA breaker	Dominion (100%)
b1653	Replace Clifton 230kV breaker '26582' with 63kA breaker	Dominion (100%)
b1654	Replace Clifton 230kV breaker '26682' with 63kA breaker	Dominion (100%)
b1655	Replace Clifton 230kV breaker '205182' with 63kA breaker	Dominion (100%)
b1656	Replace Clifton 230kV breaker '265T266' with 63kA breaker	Dominion (100%)
b1657	Replace Clifton 230kV breaker '2051T2063' with 63kA breaker	Dominion (100%)
b1694	Rebuild Loudoun - Brambleton 500 kV Rebuild Loudoun - Brambleton 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (14.19%) / BGE (12.70%) / Dominion (58.79%) / PEPCO (14.32%)</u>
b1696	Install a breaker and a half scheme with a minimum of eight 230 kV breakers for five existing lines at Idylwood 230 kV	AEC (0.46%) / APS (4.18%) / BGE (2.02%) / DPL (0.80%) / Dominion (88.45%) / JCPL (0.64%) / ME (0.50%) / NEPTUNE* (0.06%) / PECO (1.55%) / PEPCO (1.34%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1697	Build a 2nd Clark - Idylwood 230 kV line and install 230 kV gas-hybrid breakers at Clark	AEC (1.35%) / APS (15.65%) / BGE (10.53%) / DPL (2.59%) / Dominion (46.97%) / JCPL (2.36%) / ME (1.91%) / NEPTUNE* (0.23%) / PECO (4.48%) / PEPCO (11.23%) / PSEG (2.59%) / RE (0.11%)
b1698	Install a 2nd 500/230 kV transformer at Brambleton	APS (4.21%) / BGE (13.28%) / DPL (1.09%) / Dominion (59.38%) / PEPCO (22.04%)
b1698.1	Install a 500 kV breaker at Brambleton	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1698.6	Replace Brambleton 230 kV breaker '2094T2095'	Dominion (100%)
b1699	Reconfigure Line #203 to feed Edwards Ferry sub radial from Pleasant View 230 kV and install new breaker bay at Pleasant View Sub	Dominion (100%)
b1700	Install a 230/115 kV transformer at the new Liberty substation to relieve Gainesville Transformer #3	Dominion (100%)
b1701	Reconductor line #2104 (Fredericksburg - Cranes Corner 230 kV)	APS (8.66%) / BGE (10.95%) / Dominion (63.30%) / PEPCO (17.09%)
b1724	Install a 2nd 138/115 kV transformer at Edinburg	Dominion (100%)
b1728	Replace the 115/34.5 kV transformer #1 at Hickory with a 230/34.5 kV transformer	Dominion (100%)
b1729	Add 4 breaker ring bus at Burton 115 kV substation and construct a 115 kV line approximately 3.5 miles from Oakwood 115 kV substation to Burton 115 kV substation	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1730	Install a 230/115 kV transformer at a new Liberty substation	Dominion (100%)
b1731	Uprate or rebuild Four Rivers – Kings Dominion 115 kV line or Install capacitors or convert load from 115 kV system to 230 kV system	Dominion (100%)
b1790	Split Wharton 115 kV capacitor bank into two smaller units and add additional reactive support in area by correcting power factor at Pantego 115 kV DP and FivePoints 115 kV DP to minimum of 0.973	Dominion (100%)
b1791	Wreck and rebuild 2.1 mile section of Line #11 section between Gordonsville and Somerset	APS (5.83%) / BGE (6.25%) / Dominion (78.38%) / PEPCO (9.54%)
b1792	Rebuild line #33 Halifax to Chase City, 26 miles. Install 230 kV 4 breaker ring bus	Dominion (100%)
b1793	Wreck and rebuild remaining section of Line #22, 19.5 miles and replace two pole H frame construction built in 1930	Dominion (100%)
b1794	Split 230 kV Line #2056 (Hornertown - Rocky Mount) and double tap line to Battleboro Substation. Expand station, install a 230 kV 3 breaker ring bus and install a 230/115 kV transformer	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1795	Reconductor segment of Line #54 (Carolina to Woodland 115 kV) to a minimum of 300 MVA	Dominion (100%)
b1796	Install 115 kV 25 MVAR capacitor bank at Kitty Hawk Substation	Dominion (100%)
b1797	Wreck and rebuild 7 miles of the Dominion owned section of Cloverdale - Lexington 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (0.86%) / APS (41.66%) / ATSI (0.40%) / BGE (20.89%) / Dayton (0.14%) / DEOK (0.44%) / Dominion (0.95%) / EKPC (0.13%) / PEPCO (34.53%)</u>
b1798	Build a 450 MVAR SVC and 300 MVAR switched shunt at Loudoun 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (88.62%) / PEPCO (11.38%)</u>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1799	Build 150 MVAR Switched Shunt at Pleasant View 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (3.37%) / Dominion (95.01%)</u>  <u>/ ME (0.54%) / PEPCO (1.08%)</u></p>
b1805	Install a 250 MVAR SVC at the existing Mt. Storm 500kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>
b1809	Replace Brambleton 230 kV Breaker '22702'	Dominion (100%)
b1810	Replace Brambleton 230 kV Breaker '227T2094'	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.1	Surry to Skiffes Creek 500 kV Line (7 miles overhead)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS  (5.50%) / ATSI (8.04%) / BGE  (4.16%) / ComEd (13.35%) / ConEd  (0.57%) / Dayton (2.11%) / DEOK  (3.35%) / DL (1.76%) / DPL  (2.60%) / Dominion (12.32%) /  EKPC (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>Dominion (100%)</u></b></p>
b1905.2	Surry 500 kV Station Work	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS  (5.50%) / ATSI (8.04%) / BGE  (4.16%) / ComEd (13.35%) / ConEd  (0.57%) / Dayton (2.11%) / DEOK  (3.35%) / DL (1.76%) / DPL  (2.60%) / Dominion (12.32%) /  EKPC (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>Dominion (100%)</u></b></p>
b1905.3	Skiffes Creek 500-230 kV Tx and Switching Station	Dominion (99.84%) / PEPCO (0.16%)
b1905.4	New Skiffes Creek - Whealton 230 kV line	Dominion (99.84%) / PEPCO (0.16%)
b1905.5	Whealton 230 kV breakers	Dominion (99.84%) / PEPCO (0.16%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.6	Yorktown 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.7	Lanexa 115 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.8	Surry 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.9	Kings Mill, Peninmen, Toano, Waller, Warwick	Dominion (99.84%) / PEPCO (0.16%)
b1906.1	At Yadkin 500 kV, install six 500 kV breakers	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (100%)</u>
b1906.2	Install a 2nd 230/115 kV TX at Yadkin	Dominion (100%)
b1906.3	Install a 2nd 230/115 kV TX at Chesapeake	Dominion (100%)
b1906.4	Uprate Yadkin – Chesapeake 115 kV	Dominion (100%)
b1906.5	Install a third 500/230 kV TX at Yadkin	Dominion (100%)
b1907	Install a 3rd 500/230 kV TX at Clover	APS (5.83%) / BGE (4.74%) / Dominion (81.79%) / PEPCO (7.64%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1908	Rebuild Lexington – Dooms 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>DEOK (1.12%) / Dominion (85.91%) / EKPC (0.33%) / PEPCO (12.64%)</u></p>
b1909	Uprate Bremono – Midlothian 230 kV to its maximum operating temperature	APS (6.31%) / BGE (3.81%) / Dominion (81.90%) / PEPCO (7.98%)
b1910	Build a Suffolk – Yadkin 230 kV line (14 miles) and install 4 breakers	Dominion (100%)
b1911	Add a second Valley 500/230 kV TX	APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)
b1912	Install a 500 MVAR SVC at Landstown 230 kV	DEOK (0.46%) / Dominion (99.54%)
b2053	Rebuild 28 mile line	AEP (100%)
b2125	Install four additional 230 kV 100 MVAR variable shunt reactor banks at Clifton, Gallows Road, Garrisonville, and Virginia Hills substations	Dominion (100%)
b2126	Install two additional 230 kV 100 MVAR variable shunt reactor banks at Churchland and Shawboro substations	Dominion (100%)

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\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2181	Add a motor to an existing switch at Prince George to allow for Sectionalizing scheme for line #2124 and allow for Brickhouse DP to be re-energized from the 115 kV source	Dominion (100%)
b2182	Install 230kV 4-breaker ring at Enterprise 230 kV to isolate load from transmission system when substation initially built	Dominion (100%)
b2183	Add a motor to an existing switch at Keene Mill to allow for a sectionalizing scheme	Dominion (100%)
b2184	Install a 230 kV breaker at Tarboro to split line #229. Each will feed an autotransformer at Tarboro. Install switches on each autotransformer	Dominion (100%)
b2185	Uprate Line #69 segment Reams DP to Purdy (19 miles) from 41 MVA to 162 MVA by replacing 5 structures and re-sagging the line from 50C to 75C	Dominion (100%)
b2186	Install a 2nd 230-115kV transformer at Earleys connected to the existing 115kV and 230kV ring busses. Add a 115 kV breaker and 230kV breaker to the ring busses	Dominion (100%)
b2187	Install 4 - 230kV breakers at Shellhorn 230 kV to isolate load	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

Schedule 12 – Appendix  
Versions effective February 1, 2017 - MAIT Integration  
(Marked Format)

## SCHEDULE 12 – APPENDIX

### (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0215	Install 230Kv series reactor and 2- 100MVAR PLC switched capacitors at Hunterstown	AEC (6.68%) / APS (3.95%) / ConEd (0.42%) / DPL (9.06%) / JCPL (16.78%) / ME (10.49%) / Neptune* (1.68%) / PECO (18.92%) / PPL (7.52%) / PSEG (22.57%) / RE (0.34%) / UGI (0.95%) / ECP** (0.64%)
b0404.1	Replace South Reading 230 kV breaker 107252	ME (100%)
b0404.2	Replace South Reading 230 kV breaker 100652	ME (100%)
b0575.1	Rebuild Hunterstown – Texas Eastern Tap 115 kV	ME (100%)
b0575.2	Rebuild Texas Eastern Tap – Gardners 115 kV and associated upgrades at Gardners including disconnect switches	ME (100%)
b0650	Reconductor Jackson – JE Baker – Taxville 115 kV line	ME (100%)
b0652	Install bus tie circuit breaker on Yorkana 115 kV bus and expand the Yorkana 230 kV ring bus by one breaker so that the Yorkana 230/115 kV banks 1, 3, and 4 cannot be lost for either B-14 breaker fault or a 230 kV line or bank fault with a stuck breaker	ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0653	Construct a 230 kV Bernville station by tapping the North Temple – North Lebanon 230 kV line. Install a 230/69 kV transformer at existing Bernville 69 kV station		ME (100%)
b1000	Replace Portland 115kV breaker '95312'		ME (100%)
b1001	Replace Portland 115kV breaker '92712'		ME (100%)
b1002	Replace Hunterstown 115 kV breaker '96392'		ME (100%)
b1003	Replace Hunterstown 115 kV breaker '96292'		ME (100%)
b1004	Replace Hunterstown 115 kV breaker '99192'		ME (100%)
b1061	Replace existing Yorkana 230/115 kV transformer banks 1 and 4 with a single, larger transformer similar to transformer bank #3		ME (100%)
b1061.1	Replace the Yorkana 115 kV breaker '97282'		ME (100%)
b1061.2	Replace the Yorkana 115 kV breaker 'B282'		ME (100%)
b1302	Replace the limiting bus conductor and wave trap at the Jackson 115 kV terminal of the Jackson – JE Baker Tap 115 kV line		ME (100%)
b1365	Reconductor the Middletown – Collins 115 kV (975) line 0.32 miles of 336 ACSR		ME (100%)

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\*\* East Coast Power, L.L.C.

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b1366	Reconductor the Collins – Cly – Newberry 115 kV (975) line 5 miles with 795 ACSR		ME (100%)
b1727	Reconductor 2.4 miles of existing 556 and 795 ACSR from Harley Davidson to Pleasureville 115 kV with 795 ACSS to raise the ratings		ME (100%)
b1800	Install a 500 MVAR SVC at the existing Hunterstown 500kV substation		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ATSI (0.42%) / BGE (55.33%) / DL (0.15%) / DPL (19.19%) / ME (24.91%)</u></p>
b1801	Build a 250 MVAR SVC at Altoona 230 kV		AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / Neptune* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)



**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1816.5	Replace SCCIR (Sub-conductor) at Hunterstown Substation on the No. 1, 230/115 kV transformer	ME (100%)
b1999	Replace limiting wave trap, circuit breaker, substation conductor, relay and current transformer components at Northwood	ME (100%)
b2000	Replace limiting wave trap on the Glendon - Hosensack line	ME (100%)
b2001	Replace limiting circuit breaker and substation conductor transformer components at Portland 230kV	ME (100%)
b2002	Northwood 230/115 kV Transformer upgrade	ME (100%)
b2023	Construct a new North Temple - Riverview - Cartech 69 kV line (4.7 miles) with 795 ACSR	ME (100%)
b2024	Upgrade 4/0 substation conductors at Middletown 69 kV	ME (100%)
b2025	Upgrade 4/0 and 350 Cu substation conductors at the Middletown Junction terminal of the Middletown Junction - Wood Street Tap 69 kV line	ME (100%)
b2026	Upgrade an OC protection relay at the Baldy 69 kV substation	ME (100%)
b2148	Install a 115 kV 28.8 MVAR capacitor at Pleasureville substation	ME (100%)

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2149 Upgrade substation riser on the Smith St. - York Inc. 115 kV line		ME (100%)
b2150 Upgrade York Haven structure 115 kV bus conductor on Middletown Jct. - Zions View 115 kV		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## SCHEDULE 12 – APPENDIX

### (7) Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.1	Build 500 kV substation in PENELEC – Tap the Keystone – Juniata and Conemaugh – Juniata 500 kV, connect the circuits with a breaker and half scheme, and install new 400 MVAR capacitor	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0284.3	Replace wave trap and upgrade a bus section at Keystone 500 kV – on the Keystone – Airydale 500 kV	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0285.1	Replace wave trap at Keystone 500 kV – on the Keystone – Conemaugh 500 kV	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0285.2	Replace wave trap and relay at Conemaugh 500 kV – on the Conemaugh – Keystone 500 kV	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

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\*\* East Coast Power, L.L.C.

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0349	Upgrade Rolling Meadows-Gore Jct 115 kV	PENELEC (100%)
b0360	Construction of a ring bus on the 345 kV side of Wayne substation	PENELEC (100%)
b0365	Add a 50 MVAR, 230 kV cap bank at Altoona 230 kV	PENELEC (100%)
b0369	Install 100 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0370	Install 500 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0376	Install 300 MVAR capacitor at Conemaugh 500 kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (5.11%) / BGE (14.99%) / DL (0.25%) / ECP (0.76%) / HTP (0.70%) / JCPL (19.52%) / ME (11.95%) / NEPTUNE (2.12%) / PECO (19.24%) / PSEG (24.38%) / RE (0.98%)</p>
b0442	Spare Keystone 500/230 kV transformer	PENELEC (100%)
b0515	Replace Lewistown circuit breaker 1LY Yeagertown	PENELEC (100%)
b0516	Replace Lewistown circuit breaker 2LY Yeagertown	PENELEC (100%)
b0517	Replace Shawville bus section circuit breaker	PENELEC (100%)
b0518	Replace Homer City circuit breaker 201 Johnstown	PENELEC (100%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0519	Replace Keystone circuit breaker 4 Transformer - 20	PENELEC (100%)
b0549	Install 250 MVAR capacitor at Keystone 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.17%) / ATSI (0.35%) / BGE (20.18%) / DL (0.15%) / ECP (0.60%) / HTP (0.54%) / JCPL (17.10%) / ME (13.58%) / NEPTUNE (1.86%) / PECO (19.27%) / PSEG (20.38%) / RE (0.82%)</u></p>
b0550	Install 25 MVAR capacitor at Lewis Run 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0551	Install 25 MVAR capacitor at Saxton 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0552	Install 50 MVAR capacitor at Altoona 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0553	Install 50 MVAR capacitor at Raystown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0555	Install 100 MVAR capacitor at Johnstown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0556	Install 50 MVAR capacitor at Grover 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0557	Install 75 MVAR capacitor at East Towanda 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0563	Install 25 MVAR capacitor at Farmers Valley 115 kV substation	PENELEC (100%)
b0564	Install 10 MVAR capacitor at Ridgeway 115 kV substation	PENELEC (100%)

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\*\* East Coast Power, L.L.C.



**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0654	Reconfigure the Cambria Slope 115 kV and Wilmore Junction 115 kV stations to eliminate Wilmore Junction 115 kV 3-terminal line	PENELEC (100%)
b0655	Reconfigure and expand the Glade 230 kV ring bus to eliminate the Glade Tap 230 kV 3-terminal line	PENELEC (100%)
b0656	Add three breakers to form a ring bus at Altoona 230 kV	PENELEC (100%)
b0794	Upgrade the Homer City 230 kV breaker 'Pierce Road'	PENELEC (100%)
b1005	Replace Glory 115 kV breaker '#7 XFMR'	PENELEC (100%)
b1006	Replace Shawville 115 kV breaker 'NO.14 XFMR'	PENELEC (100%)
b1007	Replace Shawville 115 kV breaker 'NO.15 XFMR'	PENELEC (100%)
b1008	Replace Shawville 115 kV breaker '#1B XFMR'	PENELEC (100%)
b1009	Replace Shawville 115 kV breaker '#2B XFMR'	PENELEC (100%)
b1010	Replace Shawville 115 kV breaker 'Dubois'	PENELEC (100%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1011	Replace Shawville 115 kV breaker 'Philipsburg'	PENELEC (100%)
b1012	Replace Shawville 115 kV breaker 'Garman'	PENELEC (100%)
b1059	Replace a CRS relay at Hooversville 115 kV station	PENELEC (100%)
b1060	Replace a CRS relay at Rachel Hill 115 kV station	PENELEC (100%)
b1153	Upgrade Conemaugh 500/230 kV transformer and add a new line from Conemaugh-Seward 230 kV	AEC (3.72%) / APS (6.23%) / BGE (16.75%) / ConEd (0.39%) / DL (0.32%) / JCPL (12.52%) / ME (6.87%) / PECO (11.49%) / PEPCO (0.55%) / PPL (15.36%) / PSEG (20.44%) / RE (0.71%) / NEPTUNE* (1.70%) / ECP** (2.95%)
b1153.1	Revise the reclosing on the Shelocta 115 kV breaker 'Lucerne'	PENELEC (100%)
b1169	Replace Shawville 115 kV breaker '#1A XFMR'	PENELEC (100%)
b1170	Replace Shawville 115 kV breaker '#2A XFMR'	PENELEC (100%)
b1277	Build a new Osterburg East – Bedford North 115 kV Line, 5.7 miles of 795 ACSR	PENELEC (100%)
b1278	Install 25 MVAR Capacitor Bank at Somerset 115 kV	PENELEC (100%)

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1367 Replace the Cambria Slope 115/46 kV 50 MVA transformer with 75 MVA		PENELEC (100%)
b1368 Replace the Claysburg 115/46 kV 30 MVA transformer with 75 MVA		PENELEC (100%)
b1369 Replace the 4/0 CU substation conductor with 795 ACSR on the Westfall S21 Tap 46 kV line		PENELEC (100%)
b1370 Install a 3rd 115/46 kV transformer at Westfall		PENELEC (100%)
b1371 Reconductor 2.6 miles of the Claysburg – HCR 46 kV line with 636 ACSR		PENELEC (100%)
b1372 Replace 4/0 CU substation conductor with 795 ACSR on the Hollidaysburg – HCR 46 kV		PENELEC (100%)
b1373 Re-configure the Erie West 345 kV substation, add a new circuit breaker and relocate the Ashtabula line exit		PENELEC (100%)
b1374 Replace wave traps at Raritan River and Deep Run 115 kV substations with higher rated equipment for both B2 and C3 circuits		PENELEC (100%)
b1535 Reconductor 0.8 miles of the Gore Junction – ESG Tap 115 kV line with 795 ACSS		PENELEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1607	Reconductor the New Baltimore - Bedford North 115 kV	PENELEC (100%)
b1608	Construct a new 345/115 kV substation and loop the Mansfield - Everts 115 kV	APS (8.57%) / ConEd (0.47%) / PECO (1.71%) / PENELEC (89.25%)
b1609	Construct Four Mile Junction 230/115 kV substation. Loop the Erie South - Erie East 230 kV line, Buffalo Road - Corry East and Buffalo Road - Erie South 115 kV lines	APS (4.86%) / PENELEC (95.14%)
b1610	Install a new 230 kV breaker at Yeagertown	PENELEC (100%)
b1713	Install a 345 kV breaker at Erie West and relocate Ashtabula 345 kV line	PENELEC (100%)
b1769	Install a 75 MVAR cap bank on the Four Mile 230 kV bus	PENELEC (100%)
b1770	Install a 50 MVAR cap bank on the Buffalo Road 115 kV bus	PENELEC (100%)
b1802	Build a 100 MVAR Fast Switched Shunt and 200 MVAR Switched Shunt at Mansfield 345 kV	AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / NEPTUNE* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1821	Replace the Erie South 115 kV breaker 'Union City'	PENELEC (100%)
b1943	Construct a 115 kV ring bus at Claysburg Substation. Bedford North and Saxton lines will no longer share a common breaker	PENELEC (100%)
b1944	Reconductor Eclipse substation 115 kV bus with 1033 kcmil conductor	PENELEC (100%)
b1945	Install second 230/115 kV autotransformer at Johnstown	PENELEC (100%)
b1966	Replace the 1200 Amp Line trap at Lewistown on the Raystown-Lewistown 230 kV line and replace substation conductor at Lewistown	PENELEC (100%)
b1967	Replace the Blairsville 138/115 kV transformer	PENELEC (100%)
b1990	Install a 25 MVAR 115 kV Capacitor at Grandview	PENELEC (100%)
b1991	Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the Homer City-Stolle Road 345 kV line into Farmers Valley	PENELEC (100%)
b1992	Reconductor Cambria Slope-Summit 115kV with 795 ACSS Conductor	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1993	Relocate the Erie South 345 kV line terminal	APS (10.09%) / ECP** (0.45%) / HTP (0.49%) / JCPL (5.14%) / Neptune* (0.54%) / PENELEC (70.71%) / PSEG (12.10%) / RE (0.48%)
b1994	Convert Lewis Run-Farmers Valley to 230 kV using 1033.5 ACSR conductor. Project to be completed in conjunction with new Farmers Valley 345/230 kV transformation	APS (33.20%) / ECP** (0.44%) / HTP (0.44%) / JCPL (8.64%) / ME (5.52%) / Neptune (0.86%) / PENELEC (36.81%) / PSEG (13.55%) / RE (0.54%)
b1995	Change CT Ratio at Claysburg	PENELEC (100%)
b1996.1	Replace 600 Amp Disconnect Switches on Ridgeway-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1996.2	Reconductor Ridgeway and Whetstone 115 kV Bus	PENELEC (100%)
b1996.3	Replace Wave Trap at Ridgeway	PENELEC (100%)
b1996.4	Change CT Ratio at Ridgeway	PENELEC (100%)
b1997	Replace 600 Amp Disconnect Switches on Dubois-Harvey Run-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville		PENELEC (100%)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

Schedule 12 – Appendix  
Versions effective May 1, 2017 - ConEd Wheeling  
Termination

(Marked Format)



## SCHEDULE 12 – APPENDIX

### (1) Atlantic City Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0135	Build new Cumberland – Dennis 230 kV circuit which replaces existing Cumberland – Corson 138 kV	AEC (100%)
b0136	Install Dennis 230/138 kV transformer, Dennis 150 MVAR SVC and 50 MVAR capacitor	AEC (100%)
b0137	Build new Dennis – Corson 138 kV circuit	AEC (100%)
b0138	Install Cardiff 230/138 kV transformer and a 50 MVAR capacitor at Cardiff	AEC (100%)
b0139	Build new Cardiff – Lewis 138 kV circuit	AEC (100%)
b0140	Reconductor Laurel – Woodstown 69 kV	AEC (100%)
b0141	Reconductor Monroe – North Central 69 kV	AEC (100%)
b0265	Upgrade AE portion of Delco Tap – Mickleton 230 kV circuit	AEC (89.87%) / JCPL (9.48%) / Neptune* (0.65%)
b0276	Replace both Monroe 230/69 kV transformers	AEC (91.28%) / PSEG (8.29%) / RE (0.23%) / ECP** (0.20%)
b0276.1	Upgrade a strand bus at Monroe to increase the rating of transformer #2	AEC (100%)
b0277	Install a second Cumberland 230/138 kV transformer	AEC (100%)
b0281.1	Install 35 MVAR capacitor at Lake Ave 69 kV substation	AEC (100%)

## Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0281.2	Install 15 MVAR capacitor at Shipbottom 69 kV substation	AEC (100%)
b0281.3	Install 8 MVAR capacitors on the AE distribution system	AEC (100%)
b0142	Reconductor Landis – Minotola 138 kV	AEC (100%)
b0143	Reconductor Beckett – Paulsboro 69 kV	AEC (100%)
b0210	Install a new 500/230kV substation in AEC area. The high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (100%)</u>
b0210.1	Orchard – Cumberland – Install second 230 kV line	AEC (65.23%) / JCPL (25.87%) / Neptune * (2.55%) / PSEG (6.35%)††
b0210.2	Install a new 500/230kV substation in AEC area, the high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)††

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

### Atlantic City Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0211	Reconductor Union - Corson 138kV circuit		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0212	Substation upgrades at Union and Corson 138kV		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0214	Install 50 MVAR capacitor at Cardiff 230kV substation		AEC (100%)
b0431	Monroe Upgrade New Freedom strand bus		AEC (100%)
b0576	Move the Monroe 230/69 kV to Mickleton		AEC (100%)
b0744	Upgrade a strand bus at Mill 138 kV		AEC (100%)
b0871	Install 35 MVAR capacitor at Motts Farm 69 kV		AEC (100%)
b1072	Modify the existing EMS load shedding scheme at Cedar to additionally sense the loss of both Cedar 230/69 kV transformers and shed load accordingly		AEC (100%)
b1127	Build a new Lincoln-Minitola 138 kV line		AEC (100%)
b1195.1	Upgrade the Corson sub T2 terminal		AEC (100%)
b1195.2	Upgrade the Corson sub T1 terminal		AEC (100%)

### Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1244	Install 10 MVAR capacitor at Peermont 69 kV substation	AEC (100%)
b1245	Rebuild the Newport-South Millville 69 kV line	AEC (100%)
b1250	Reconductor the Monroe – Glassboro 69 kV	AEC (100%)
b1250.1	Upgrade substation equipment at Glassboro	AEC (100%)
b1280	Sherman: Upgrade 138/69 kV transformers	AEC (100%)
b1396	Replace Lewis 138 kV breaker ‘L’	AEC (100%)
b1398.5	Reconductor the existing Mickleton – Goucestr 230 kV circuit (AE portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1598	Reconductor Sherman Av – Carl’s Corner 69kV circuit	AEC (100%)
b1599	Replace terminal equipments at Central North 69 kV substation	AEC (100%)
b1600	Upgrade the Mill T2 138/69 kV transformer	AEC (88.83%) / JCPL (4.74%) / HTP (0.20%) / ECP** (0.22%) / PSEG (5.78%) / RE (0.23%)
b2157	Re-build 5.3 miles of the Corson - Tuckahoe 69 kV circuit	AEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

## SCHEDULE 12 – APPENDIX

### (3) Delmarva Power & Light Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0144.1	Build new Red Lion – Milford – Indian River 230 kV circuit	DPL (100%)
b0144.2	Indian River Sub – 230 kV Terminal Position	DPL (100%)
b0144.3	Red Lion Sub – 230 kV Terminal Position	DPL (100%)
b0144.4	Milford Sub – (2) 230 kV Terminal Positions	DPL (100%)
b0144.5	Indian River – 138 kV Transmission Line to AT-20	DPL (100%)
b0144.6	Indian River – 138 & 69 kV Transmission Ckts. Undergrounding	DPL (100%)
b0144.7	Indian River – (2) 230 kV bus ties	DPL (100%)
b0148	Re-rate Glasgow – Mt. Pleasant 138 kV and North Seaford – South Harrington 138 kV	DPL (100%)
b0149	Complete structure work to increase rating of Cheswold – Jones REA 138 kV	DPL (100%)
b0221	Replace disconnect switch on Edgewood-N. Salisbury 69 kV	DPL (100%)
b0241.1	Keeny Sub – Replace overstressed breakers	DPL (100%)
b0241.2	Edgemoor Sub – Replace overstressed breakers	DPL (100%)
b0241.3	Red Lion Sub – Substation reconfigure to provide for second Red Lion 500/230 kV transformer	DPL (84.5%) / PECO (15.5%)
b0261	Replace 1200 Amp disconnect switch on the Red Lion – Reybold 138 kV circuit	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0262	Reconductor 0.5 miles of Christiana – Edgemoor 138 kV	DPL (100%)
b0263	Replace 1200 Amp wavetrapp at Indian River on the Indian River – Frankford 138 kV line	DPL (100%)
b0272.1	Replace line trap and disconnect switch at Keeney 500 kV substation – 5025 Line Terminal Upgrade	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPSCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (21.12%) / BGE (1.94%) / DPL (38.69%) / ECP (0.11%) / HTP (0.15%) / JCPL (7.65%) / NEPTUNE (0.99%) / PECO (26.10%) / PEPSCO (1.83%) / PPL (1.42%)</p>
b0282	Install 46 MVAR capacitors on the DPL distribution system	DPL (100%)
b0291	Replace 1600A disconnect switch at Harmony 230 kV and for the Harmony – Edgemoor 230 kV circuit, increase the operating temperature of the conductor	DPL (100%)
b0295	Raise conductor temperature of North Seaford – Pine Street – Dupont Seaford	DPL (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, LLC

\*\*\*Hudson Transmission Partners, LLC

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0296	Rehoboth/Cedar Neck Tap (6733-2) upgrade		DPL (100%)
b0320	Create a new 230 kV station that splits the 2 <sup>nd</sup> Milford to Indian River 230 kV line, add a 230/69 kV transformer, and run a new 69 kV line down to Harbeson 69 kV		DPL (100%)
b0382	Cambridge Sub – Close through to Todd Substation		DPL (100%)
b0383	Wye Mills AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0384	Replace Indian River AT-20 (400 MVA)		DPL (100%)
b0385	Oak Hall to New Church (13765) Upgrade		DPL (100%)
b0386	Cheswold/Kent (6768) Rebuild		DPL (100%)
b0387	N. Seaford – Add a 2 <sup>nd</sup> 138/69 kV autotransformer		DPL (100%)
b0388	Hallwood/Parksley (6790-2) Upgrade		DPL (100%)
b0389	Indian River AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0390	Rehoboth/Lewes (6751-1 and 6751-2) Upgrade		DPL (100%)
b0391	Kent/New Meredith (6704-2) Upgrade		DPL (100%)
b0392	East New Market Sub – Establish a 69 kV Bus Arrangement		DPL (100%)
b0415	Increase the temperature ratings of the Edgemoor – Christiana – New Castle 138 kV by replacing six transmission poles		DPL (100%)

### Delmarva Power & Light Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0437	Spare Keeney 500/230 kV transformer		DPL (100%)
b0441	Additional spare Keeney 500/230 kV transformer		DPL (100%)
b0480	Rebuild Lank – Five Points 69 kV		DPL (100%)
b0481	Replace wave trap at Indian River 138 kV on the Omar – Indian River 138 kV circuit		DPL (100%)
b0482	Rebuild Millsboro – Zoar REA 69 kV		DPL (100%)
b0483	Replace Church 138/69 kV transformer and add two breakers		DPL (100%)
b0483.1	Build Oak Hall – Wattsville 138 kV line		DPL (100%)
b0483.2	Add 138/69 kV transformer at Wattsville		DPL (100%)
b0483.3	Establish 138 kV bus position at Oak Hall		DPL (100%)
b0484	Re-tension Worcester – Berlin 69 kV for 125°C		DPL (100%)
b0485	Re-tension Taylor – North Seaford 69 kV for 125°C		DPL (100%)
b0494.1	Install a 2 <sup>nd</sup> Red Lion 230/138 kV		DPL (100%)
b0494.2	Hares Corner – Relay Improvement		DPL (100%)
b0494.3	Reybold – Relay Improvement		DPL (100%)
b0494.4	New Castle – Relay Improvement		DPL (100%)



## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0513	Rebuild the Ocean Bay – Maridel 69 kV line	DPL (100%)
b0527	Replace existing 12 MVAR capacitor at Bethany with a 30 MVAR capacitor	DPL (100%)
b0528	Replace existing 69/12 kV transformer at Bethany with a 138/12 kV transformer	DPL (100%)
b0529	Install an additional 8.4 MVAR capacitor at Grasonville 69 Kv	DPL (100%)
b0530	Replace existing 12 MVAR capacitor at Wye Mills with a 30 MVAR capacitor	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0531	Create a four breaker 138 kV ring bus at Wye Mills and add a second 138/69 kV transformer		DPL (100%)
b0566	Rebuild the Trappe Tap – Todd 69 kV line		DPL (100%)
b0567	Rebuild the Mt. Pleasant – Townsend 138 kV line		DPL (100%)
b0568	Install a third Indian River 230/138 kV transformer		DPL (100%)
b0725	Add a third Steele 230/138 kV transformer		DPL (100%)
b0732	Rebuild Vaugh – Wells 69 kV		DPL (100%)
b0733	Add a second 230/138 kV transformer at Harmony		DPL (97.06%) / PECO (2.94%)
b0734	Rebuild Church – Steele 138 kV		DPL (100%)
b0735	Rebuild Indian River – Omar – Bethany 138 kV		DPL (100%)
b0736	Rebuild Dupont Edgemoor – Edgemoor – Silverside 69 kV		DPL (69.46%) / PECO (17.25%) / ECP** (0.27%) / PSEG (12.53%) / RE (0.49%)
b0737	Build a new Indian River – Bishop 138 kV line		DPL (100%)
b0750	Convert 138 kV network path from Vienna – Loretto – Piney - Grove to 230 kV, add 230/138 kV transformer to Loretto 230 kV		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0751	Add two additional breakers at Keeney 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  DPL (100%)</p>
b0752	Replace two circuit breakers to bring the emergency rating up to 348 MVA	DPL (100%)
b0753	Add a second Loretto 230/138 kV transformer	DPL (100%)
b0754	Rebuild 10 miles of Glasgow to Mt. Pleasant 138 kV line to bring the normal rating to 298 MVA and the emergency rating to 333 MVA	DPL (100%)
b0792	Reconfigure Cecil Sub into 230 and 138 kV ring buses, add a 230/138 kV transformer, and operate the 34.5 kV bus normally open	DPL (100%)
b0873	Build 2nd Glasgow-Mt Pleasant 138 kV line	DPL (100%)
b0874	Reconfigure Brandywine substation	DPL (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, LLC

\*\*\*Hudson Transmission Partners, LLC

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0876	Install 50 MVAR SVC at 138th St 138 kV	DPL (100%)
b0877	Build a 2nd Vienna-Steele 230 kV line	DPL (100%)
b0879.1	Apply a special protection scheme (load drop at Stevensville and Grasonville)	DPL (100%)
b1246	Re-build the Townsend – Church 138 kV circuit	DPL (100%)
b1247	Re-build the Glasgow – Cecil 138 kV circuit	DPL (72.06%) / PECO (27.94%)
b1248	Install two 15 MVAR capacitor at Loretto 69 kV	DPL (100%)
b1249	Reconfigure the existing Sussex 69 kV capacitor	DPL (100%)
b1603	Upgrade 19 miles conductor of the Wattsville - Signepost - Stockton - Kenney 69 kV circuit	DPL (100%)
b1604	Replace CT at Reybold 138 kV substation	DPL (100%)
b1723	Replace strand bus and disconnect switch at Glasgow 138 kV substation	DPL (100%)
b1899.1	Install new variable reactors at Indian River and Nelson 138 kV	DPL (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-3.

**Delmarva Power & Light Company (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1899.2	Install new variable reactors at Cedar Creek 230 kV		DPL (100%)
b1899.3	Install new variable reactors at New Castle 138 kV and Easton 69 kV		DPL (100%)

## SCHEDULE 12 – APPENDIX

### (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0215	Install 230Kv series reactor and 2- 100MVAR PLC switched capacitors at Hunterstown	AEC (6.71%) / APS (3.97%) / DPL (9.10%) / JCPL (16.85%) / ME (10.53%) / Neptune* (1.69%) / PECO (19.00%) / PPL (7.55%) / PSEG (22.67%) / RE (0.34%) / UGI (0.95%) / ECP** (0.64%)
b0404.1	Replace South Reading 230 kV breaker 107252	ME (100%)
b0404.2	Replace South Reading 230 kV breaker 100652	ME (100%)
b0575.1	Rebuild Hunterstown – Texas Eastern Tap 115 kV	ME (100%)
b0575.2	Rebuild Texas Eastern Tap – Gardners 115 kV and associated upgrades at Gardners including disconnect switches	ME (100%)
b0650	Reconductor Jackson – JE Baker – Taxville 115 kV line	ME (100%)
b0652	Install bus tie circuit breaker on Yorkana 115 kV bus and expand the Yorkana 230 kV ring bus by one breaker so that the Yorkana 230/115 kV banks 1, 3, and 4 cannot be lost for either B-14 breaker fault or a 230 kV line or bank fault with a stuck breaker	ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0653 Construct a 230 kV Bernville station by tapping the North Temple – North Lebanon 230 kV line. Install a 230/69 kV transformer at existing Bernville 69 kV station		ME (100%)
b1000 Replace Portland 115kV breaker '95312'		ME (100%)
b1001 Replace Portland 115kV breaker '92712'		ME (100%)
b1002 Replace Hunterstown 115 kV breaker '96392'		ME (100%)
b1003 Replace Hunterstown 115 kV breaker '96292'		ME (100%)
b1004 Replace Hunterstown 115 kV breaker '99192'		ME (100%)
b1061 Replace existing Yorkana 230/115 kV transformer banks 1 and 4 with a single, larger transformer similar to transformer bank #3		ME (100%)
b1061.1 Replace the Yorkana 115 kV breaker '97282'		ME (100%)
b1061.2 Replace the Yorkana 115 kV breaker 'B282'		ME (100%)
b1302 Replace the limiting bus conductor and wave trap at the Jackson 115 kV terminal of the Jackson – JE Baker Tap 115 kV line		ME (100%)
b1365 Reconductor the Middletown – Collins 115 kV (975) line 0.32 miles of 336 ACSR		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b1366	Reconductor the Collins – Cly – Newberry 115 kV (975) line 5 miles with 795 ACSR		ME (100%)
b1727	Reconductor 2.4 miles of existing 556 and 795 ACSR from Harley Davidson to Pleasureville 115 kV with 795 ACSS to raise the ratings		ME (100%)
b1800	Install a 500 MVAR SVC at the existing Hunterstown 500kV substation		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ATSI (0.42%) / BGE (55.33%) / DL (0.15%) / DPL (19.19%) / ME (24.91%)</u></p>
b1801	Build a 250 MVAR SVC at Altoona 230 kV		AEC (6.47%) / AEP (2.58%) / APS (6.88%) / BGE (6.57%) / DPL (12.39%) / Dominion (14.89%) / JCPL (8.14%) / ME (6.21%) / Neptune* (0.82%) / PECO (21.56%) / PPL (4.89%) / PSEG (8.18%) / RE (0.33%) / ECP** (0.09%)



**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1816.5	Replace SCCIR (Sub-conductor) at Hunterstown Substation on the No. 1, 230/115 kV transformer	ME (100%)
b1999	Replace limiting wave trap, circuit breaker, substation conductor, relay and current transformer components at Northwood	ME (100%)
b2000	Replace limiting wave trap on the Glendon - Hosensack line	ME (100%)
b2001	Replace limiting circuit breaker and substation conductor transformer components at Portland 230kV	ME (100%)
b2002	Northwood 230/115 kV Transformer upgrade	ME (100%)
b2023	Construct a new North Temple - Riverview - Cartech 69 kV line (4.7 miles) with 795 ACSR	ME (100%)
b2024	Upgrade 4/0 substation conductors at Middletown 69 kV	ME (100%)
b2025	Upgrade 4/0 and 350 Cu substation conductors at the Middletown Junction terminal of the Middletown Junction - Wood Street Tap 69 kV line	ME (100%)
b2026	Upgrade an OC protection relay at the Baldy 69 kV substation	ME (100%)
b2148	Install a 115 kV 28.8 MVAR capacitor at Pleasureville substation	ME (100%)

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2149	Upgrade substation riser on the Smith St. - York Inc. 115 kV line		ME (100%)
b2150	Upgrade York Haven structure 115 kV bus conductor on Middletown Jct. - Zions View 115 kV		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## SCHEDULE 12 – APPENDIX

### (7) Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.1	Build 500 kV substation in PENELEC – Tap the Keystone – Juniata and Conemaugh – Juniata 500 kV, connect the circuits with a breaker and half scheme, and install new 400 MVAR capacitor	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0284.3	Replace wave trap and upgrade a bus section at Keystone 500 kV – on the Keystone – Airydale 500 kV	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)

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\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0285.1	Replace wave trap at Keystone 500 kV – on the Keystone – Conemaugh 500 kV	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0285.2	Replace wave trap and relay at Conemaugh 500 kV – on the Conemaugh – Keystone 500 kV	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0349	Upgrade Rolling Meadows-Gore Jct 115 kV	PENELEC (100%)
b0360	Construction of a ring bus on the 345 kV side of Wayne substation	PENELEC (100%)
b0365	Add a 50 MVAR, 230 kV cap bank at Altoona 230 kV	PENELEC (100%)
b0369	Install 100 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0370	Install 500 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0376	Install 300 MVAR capacitor at Conemaugh 500 kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (5.11%) / BGE (14.99%) / DL (0.25%) / ECP (0.76%) / HTP (0.70%) / JCPL (19.52%) / ME (11.95%) / NEPTUNE (2.12%) / PECO (19.24%) / PSEG (24.38%) / RE (0.98%)</p>
b0442	Spare Keystone 500/230 kV transformer	PENELEC (100%)
b0515	Replace Lewistown circuit breaker 1LY Yeagertown	PENELEC (100%)
b0516	Replace Lewistown circuit breaker 2LY Yeagertown	PENELEC (100%)
b0517	Replace Shawville bus section circuit breaker	PENELEC (100%)
b0518	Replace Homer City circuit breaker 201 Johnstown	PENELEC (100%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0519	Replace Keystone circuit breaker 4 Transformer - 20	PENELEC (100%)
b0549	Install 250 MVAR capacitor at Keystone 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.17%) / ATSI (0.35%) / BGE (20.18%) / DL (0.15%) / ECP (0.60%) / HTP (0.54%) / JCPL (17.10%) / ME (13.58%) / NEPTUNE (1.86%) / PECO (19.27%) / PSEG (20.38%) / RE (0.82%)</u></p>
b0550	Install 25 MVAR capacitor at Lewis Run 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0551	Install 25 MVAR capacitor at Saxton 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0552	Install 50 MVAR capacitor at Altoona 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0553	Install 50 MVAR capacitor at Raystown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0555	Install 100 MVAR capacitor at Johnstown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0556	Install 50 MVAR capacitor at Grover 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0557	Install 75 MVAR capacitor at East Towanda 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0563	Install 25 MVAR capacitor at Farmers Valley 115 kV substation	PENELEC (100%)
b0564	Install 10 MVAR capacitor at Ridgeway 115 kV substation	PENELEC (100%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0654	Reconfigure the Cambria Slope 115 kV and Wilmore Junction 115 kV stations to eliminate Wilmore Junction 115 kV 3-terminal line	PENELEC (100%)
b0655	Reconfigure and expand the Glade 230 kV ring bus to eliminate the Glade Tap 230 kV 3-terminal line	PENELEC (100%)
b0656	Add three breakers to form a ring bus at Altoona 230 kV	PENELEC (100%)
b0794	Upgrade the Homer City 230 kV breaker 'Pierce Road'	PENELEC (100%)
b1005	Replace Glory 115 kV breaker '#7 XFMR'	PENELEC (100%)
b1006	Replace Shawville 115 kV breaker 'NO.14 XFMR'	PENELEC (100%)
b1007	Replace Shawville 115 kV breaker 'NO.15 XFMR'	PENELEC (100%)
b1008	Replace Shawville 115 kV breaker '#1B XFMR'	PENELEC (100%)
b1009	Replace Shawville 115 kV breaker '#2B XFMR'	PENELEC (100%)
b1010	Replace Shawville 115 kV breaker 'Dubois'	PENELEC (100%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1011	Replace Shawville 115 kV breaker 'Philipsburg'	PENELEC (100%)
b1012	Replace Shawville 115 kV breaker 'Garman'	PENELEC (100%)
b1059	Replace a CRS relay at Hooversville 115 kV station	PENELEC (100%)
b1060	Replace a CRS relay at Rachel Hill 115 kV station	PENELEC (100%)
b1153	Upgrade Conemaugh 500/230 kV transformer and add a new line from Conemaugh-Seward 230 kV	AEC (3.74%) / APS (6.26%) / BGE (16.82%) / DL (0.32%) / JCPL (12.57%) / ME (6.89%) / PECO (11.53%) / PEPCO (0.55%) / PPL (15.42%) / PSEG (20.52%) / RE (0.72%) / NEPTUNE* (1.70%) / ECP** (2.96%)
b1153.1	Revise the reclosing on the Shelocta 115 kV breaker 'Lucerne'	PENELEC (100%)
b1169	Replace Shawville 115 kV breaker '#1A XFMR'	PENELEC (100%)
b1170	Replace Shawville 115 kV breaker '#2A XFMR'	PENELEC (100%)
b1277	Build a new Osterburg East – Bedford North 115 kV Line, 5.7 miles of 795 ACSR	PENELEC (100%)
b1278	Install 25 MVAR Capacitor Bank at Somerset 115 kV	PENELEC (100%)

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1367 Replace the Cambria Slope 115/46 kV 50 MVA transformer with 75 MVA		PENELEC (100%)
b1368 Replace the Claysburg 115/46 kV 30 MVA transformer with 75 MVA		PENELEC (100%)
b1369 Replace the 4/0 CU substation conductor with 795 ACSR on the Westfall S21 Tap 46 kV line		PENELEC (100%)
b1370 Install a 3rd 115/46 kV transformer at Westfall		PENELEC (100%)
b1371 Reconductor 2.6 miles of the Claysburg – HCR 46 kV line with 636 ACSR		PENELEC (100%)
b1372 Replace 4/0 CU substation conductor with 795 ACSR on the Hollidaysburg – HCR 46 kV		PENELEC (100%)
b1373 Re-configure the Erie West 345 kV substation, add a new circuit breaker and relocate the Ashtabula line exit		PENELEC (100%)
b1374 Replace wave traps at Raritan River and Deep Run 115 kV substations with higher rated equipment for both B2 and C3 circuits		PENELEC (100%)
b1535 Reconductor 0.8 miles of the Gore Junction – ESG Tap 115 kV line with 795 ACSS		PENELEC (100%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1607	Reconductor the New Baltimore - Bedford North 115 kV	PENELEC (100%)
b1608	Construct a new 345/115 kV substation and loop the Mansfield - Everts 115 kV	APS (8.61%) / PECO (1.72%) / PENELEC (89.67%)
b1609	Construct Four Mile Junction 230/115 kV substation. Loop the Erie South - Erie East 230 kV line, Buffalo Road - Corry East and Buffalo Road - Erie South 115 kV lines	APS (4.86%) / PENELEC (95.14%)
b1610	Install a new 230 kV breaker at Yeagertown	PENELEC (100%)
b1713	Install a 345 kV breaker at Erie West and relocate Ashtabula 345 kV line	PENELEC (100%)
b1769	Install a 75 MVAR cap bank on the Four Mile 230 kV bus	PENELEC (100%)
b1770	Install a 50 MVAR cap bank on the Buffalo Road 115 kV bus	PENELEC (100%)
b1802	Build a 100 MVAR Fast Switched Shunt and 200 MVAR Switched Shunt at Mansfield 345 kV	AEC (6.47%) / AEP (2.58%) / APS (6.88%) / BGE (6.57%) / DPL (12.39%) / Dominion (14.89%) / JCPL (8.14%) / ME (6.21%) / NEPTUNE* (0.82%) / PECO (21.56%) / PPL (4.89%) / PSEG (8.18%) / RE (0.33%) / ECP** (0.09%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1821	Replace the Erie South 115 kV breaker 'Union City'	PENELEC (100%)
b1943	Construct a 115 kV ring bus at Claysburg Substation. Bedford North and Saxton lines will no longer share a common breaker	PENELEC (100%)
b1944	Reconductor Eclipse substation 115 kV bus with 1033 kcmil conductor	PENELEC (100%)
b1945	Install second 230/115 kV autotransformer at Johnstown	PENELEC (100%)
b1966	Replace the 1200 Amp Line trap at Lewistown on the Raystown-Lewistown 230 kV line and replace substation conductor at Lewistown	PENELEC (100%)
b1967	Replace the Blairsville 138/115 kV transformer	PENELEC (100%)
b1990	Install a 25 MVAR 115 kV Capacitor at Grandview	PENELEC (100%)
b1991	Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the Homer City-Stolle Road 345 kV line into Farmers Valley	PENELEC (100%)
b1992	Reconductor Cambria Slope-Summit 115kV with 795 ACSS Conductor	PENELEC (100%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1993	Relocate the Erie South 345 kV line terminal	APS (10.09%) / ECP** (0.45%) / HTP (0.49%) / JCPL (5.14%) / Neptune* (0.54%) / PENELEC (70.71%) / PSEG (12.10%) / RE (0.48%)
b1994	Convert Lewis Run-Farmers Valley to 230 kV using 1033.5 ACSR conductor. Project to be completed in conjunction with new Farmers Valley 345/230 kV transformation	APS (33.20%) / ECP** (0.44%) / HTP (0.44%) / JCPL (8.64%) / ME (5.52%) / Neptune (0.86%) / PENELEC (36.81%) / PSEG (13.55%) / RE (0.54%)
b1995	Change CT Ratio at Claysburg	PENELEC (100%)
b1996.1	Replace 600 Amp Disconnect Switches on Ridgeway-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1996.2	Reconductor Ridgeway and Whetstone 115 kV Bus	PENELEC (100%)
b1996.3	Replace Wave Trap at Ridgeway	PENELEC (100%)
b1996.4	Change CT Ratio at Ridgeway	PENELEC (100%)
b1997	Replace 600 Amp Disconnect Switches on Dubois-Harvey Run-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville		PENELEC (100%)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

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## SCHEDULE 12 – APPENDIX

### (8) PECO Energy Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0171.1	Replace two 500 kV circuit breakers and two wave traps at Elroy substation to increase rating of Elroy - Hosensack 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.78%) / DPL (6.88%) / JCPL (10.93%) / ME (2.74%) / NEPTUNE (0.27%) / PECO (48.97%) / PSEG (24.45%) / RE (0.98%)</u></p>
b0180	Replace Whitpain 230kV circuit breaker #165	PECO (100%)
b0181	Replace Whitpain 230kV circuit breaker #J105	PECO (100%)
b0182	Upgrade Plymouth Meeting 230kV circuit breaker #125	PECO (100%)
b0205	Install three 28.8Mvar capacitors at Planebrook 35kV substation	PECO (100%)
b0206	Install 161Mvar capacitor at Planebrook 230kV substation	AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)

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\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC



## PECO Energy Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0207	Install 161Mvar capacitor at Newlinville 230kV substation		AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)
b0208	Install 161Mvar capacitor Heaton 230kV substation		AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)
b0209	Install 2% series reactor at Chichester substation on the Chichester - Mickleton 230kV circuit		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0264	Upgrade Chichester – Delco Tap 230 kV and the PECO portion of the Delco Tap – Mickleton 230 kV circuit		AEC (89.87%) / JCPL (9.48%) / Neptune* (0.65%)
b0266	Replace two wave traps and ammeter at Peach Bottom, and two wave traps and ammeter at Newlinville 230 kV substations		PECO (100%)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)†</p> <p><b><u>DFAX Allocation:</u></b>  PECO (100%)</p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLCPECO Energy Company (cont.)

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.1	Add a new 230 kV circuit between Whitpain and Heaton substations	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.2	Reconductor the Whitpain 1 – Plymtg 1 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.3	Convert the Heaton bus to a ring bus	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.4	Reconductor the Heaton – Warminster 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.5	Reconductor Warminster – Buckingham 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

## PECO Energy Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0269.6	Add a new 500 kV breaker at Whitpain between #3 transformer and 5029 line		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>PECO (100%)</u>
b0269.7	Replace North Wales 230 kV breaker #105		PECO (100%)
b0280.1	Install 161 MVAR capacitor at Warrington 230 kV substation		PECO 100%
b0280.2	Install 161 MVAR capacitor at Bradford 230 kV substation		PECO 100%
b0280.3	Install 28.8 MVAR capacitor at Warrington 34 kV substation		PECO 100%
b0280.4	Install 18 MVAR capacitor at Waverly 13.8 kV substation		PECO 100%

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

## PECO Energy Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0287	Install 600 MVAR Dynamic Reactive Device in Whitpain 500 kV vicinity		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.78%) / DPL (6.88%) / JCPL (10.93%) / ME (2.74%) / NEPTUNE (0.27%) / PECO (48.97%) / PSEG (24.45%) / RE (0.98%)</u></p>
b0351	Reconductor Tunnel – Grays Ferry 230 kV		PECO (100%)
b0352	Reconductor Tunnel – Parrish 230 kV		PECO (100%)
b0353.1	Install 2% reactors on both lines from Eddystone – Llanerch 138 kV		PECO (100%)
b0353.2	Install identical second 230/138 kV transformer in parallel with existing 230/138 kV transformer at Plymouth Meeting		PECO 100%
b0353.3	Replace Whitpain 230 kV breaker 135		PECO (100%)
b0353.4	Replace Whitpain 230 kV breaker 145		PECO (100%)

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\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

†† Cost allocations associated with below 500 kV elements of the project

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0354	Eddystone – Island Road Upgrade line terminal equipment	PECO 100%
b0355	Reconductor Master – North Philadelphia 230 kV line	PECO 100%
b0357	Reconductor Buckingham – Pleasant Valley 230 kV	JCPL (37.17%) / Neptune* (4.46%) / PSEG (54.14%) / RE (2.32%) / ECP** (1.91%)
b0359	Reconductor North Philadelphia – Waneeta 230 kV circuit	PECO 100%
b0402.1	Replace Whitpain 230 kV breaker #245	PECO (100%)
b0402.2	Replace Whitpain 230 kV breaker #255	PECO (100%)
b0438	Spare Whitpain 500/230 kV transformer	PECO (100%)
b0443	Spare Peach Bottom 500/230 kV transformer	PECO (100%)
b0505	Reconductor the North Wales – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) / PECO (83.66%)
b0506	Reconductor the North Wales – Hartman 230 kV circuit	AEC (8.58%) / DPL (7.76%) / PECO (83.66%)
b0507	Reconductor the Jarrett – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) PECO (83.66%)
b0508.1	Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit	PECO (100%)
b0509	Reconductor the Jarrett – Heaton 230 kV circuit	PECO (100%)

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0727	Rebuild Bryn Mawr – Plymouth Meeting 138 kV line	AEC (1.25%) / DPL (3.11%) / PECO (95.64%)
b0789	Reconductor the line to provide a normal rating of 677 MVA and an emergency rating of 827 MVA	AEC (0.72%) / JCPL (17.36%) / NEPTUNE* (1.70%) / PECO (44.47%) / ECP** (0.92%) / PSEG (33.52%) / RE (1.31%)
b0790	Reconductor the Bradford – Planebrook 230 kV Ckt. 220-31 to provide a normal rating of 677 MVA and emergency rating of 827 MVA	JCPL (17.30%) / NEPTUNE* (1.69%) / PECO (45.09%) / ECP** (0.93%) / PSEG (33.68%) / RE (1.31%)
b0829.1	Replace Whippain 230 kV breaker '155'	PECO (100%)
b1073	Install 2 new 230 kV breakers at Planebrook (on the 220-02 line terminal and on the 230 kV side of the #9 transformer)	PECO (100%)
b0829.2	Replace Whippain 230 kV breaker '525'	PECO (100%)
b0829.3	Replace Whippain 230 kV breaker '175'	PECO (100%)
b0829.4	Replace Plymouth Meeting 230 kV breaker '225'	PECO (100%)
b0829.5	Replace Plymouth Meeting 230 kV breaker '335'	PECO (100%)
b0841	Move the connection points for the 2nd Plymouth Meeting 230/138 kV XFMR	PECO (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0842	Install a 2nd 230/138 kV XFMR and 35 MVAR CAP at Heaton 138 kV bus	PECO (100%)
b0842.1	Replace Heaton 138 kV breaker '150'	PECO (100%)
b0843	Install a 75 MVAR CAP at Llanerch 138 kV bus	PECO (100%)
b0844	Move the connection point for the Llanerch 138/69 kV XFMR	PECO (100%)
b0887	Replace Richmond-Tacony 69 kV line	PECO (100%)
b0920	Replace station cable at Whitpain and Jarrett substations on the Jarrett - Whitpain 230 kV circuit	PECO (100%)
b1014.1	Replace Circuit breaker, Station Cable, CTs and Wave Trap at Eddystone 230 kV	PECO (100%)
b1014.2	Replace Circuit breaker, Station Cable, CTs Disconnect Switch and Wave Trap at Island Rd. 230 kV	PECO (100%)
b1015	Replace Breakers #115 and #125 at Printz 230 kV substation	PECO (100%)
b1156.1	Upgrade at Richmond 230 kV breaker '525'	PECO (100%)
b1156.2	Upgrade at Richmond 230 kV breaker '415'	PECO (100%)
b1156.3	Upgrade at Richmond 230 kV breaker '475'	PECO (100%)
b1156.4	Upgrade at Richmond 230 kV breaker '575'	PECO (100%)

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\*\* East Coast Power, L.L.C.

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1156.5	Upgrade at Richmond 230 kV breaker '185'	PECO (100%)
b1156.6	Upgrade at Richmond 230 kV breaker '285'	PECO (100%)
b1156.7	Upgrade at Richmond 230 kV breaker '85'	PECO (100%)
b1156.8	Upgrade at Waneeta 230 kV breaker '425'	PECO (100%)
b1156.9	Upgrade at Emilie 230 kV breaker '815'	PECO (100%)
b1156.10	Upgrade at Plymouth Meeting 230 kV breaker '265'	PECO (100%)
b1156.11	Upgrade at Croydon 230 kV breaker '115'	PECO (100%)
b1156.12	Replace Emilie 138 kV breaker '190'	PECO (100%)
b1178	Add a second 230/138 kV transformer at Chichester. Add an inductor in series with the parallel transformers	JCPL (4.14%) / Neptune (0.44%) / PECO (82.19%) / ECP (0.33%) / HTP (0.32%) / PSEG (12.10%) / RE (0.48%)
b1179	Replace terminal equipment at Eddystone and Saville and replace underground section of the line	PECO (100%)
b1180.1	Replace terminal equipment at Chichester	PECO (100%)
b1180.2	Replace terminal equipment at Chichester	PECO (100%)
b1181	Install 230/138 kV transformer at Eddystone	PECO (100%)

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## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1182	Reconductor Chichester – Saville 138 kV line and upgrade terminal equipment	JCPL (5.08%) / Neptune (0.54%) / PECO (78.85%) / ECP (0.39%) / HTP (0.38%) / PSEG (14.20%) / RE (0.56%)
b1183	Replace 230/69 kV transformer #6 at Cromby. Add two 50 MVAR 230 kV banks at Cromby	PECO (100%)
b1184	Add 138 kV breakers at Cromby, Perkiomen, and North Wales; add a 35 MVAR capacitor at Perkiomen 138 kV	PECO (100%)
b1185	Upgrade Eddystone 230 kV breaker #365	PECO (100%)
b1186	Upgrade Eddystone 230 kV breaker #785	PECO (100%)
b1197	Reconductor the PECO portion of the Burlington – Croydon circuit	PECO (100%)
b1198	Replace terminal equipments including station cable, disconnects and relay at Conowingo 230 kV station	PECO (100%)
b1338	Replace Printz 230 kV breaker ‘225’	PECO (100%)
b1339	Replace Printz 230 kV breaker ‘315’	PECO (100%)
b1340	Replace Printz 230 kV breaker ‘215’	PECO (100%)
b1398.6	Reconductor the Camden – Richmond 230 kV circuit (PECO portion) and upgrade terminal equipments at Camden substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.8	Reconductor Richmond – Waneeta 230 kV and replace terminal equipments at Richmond and Waneeta substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.12	Replace Graysferry 230 kV breaker ‘115’	PECO (100%)
b1398.13	Upgrade Peach Bottom 500 kV breaker ‘225’	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)†
b1398.14	Replace Whitpain 230 kV breaker ‘105’	PECO (100%)
b1590.1	Upgrade the PECO portion of the Camden – Richmond 230 kV to a six wire conductor and replace terminal equipment at Richmond.	BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPCO (1.93%) / PPL (2.46%) / ECP** (0.16%)
b1591	Reconductor the underground portion of the Richmond – Waneeta 230 kV and replace terminal equipment	BGE (4.54%) / DL (0.27%) / ME (1.04%) / HTP (0.03%) / PECO (88.08%) / PEPCO (2.79%) / PPL (3.25%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1717	Install a second Waneeta 230/138 kV transformer on a separate bus section	HTP (0.04%) / PECO (99.96%)
b1718	Reconductor the Crescentville - Foxchase 138 kV circuit	PECO (100%)
b1719	Reconductor the Foxchase - Bluegrass 138 kV circuit	PECO (100%)
b1720	Increase the effective rating of the Eddystone 230/138 kV transformer by replacing a circuit breaker at Eddystone	PECO (100%)
b1721	Increase the rating of the Waneeta - Tuna 138 kV circuit by replacing two 138 kV CTs at Waneeta	PECO (100%)
b1722	Increase the normal rating of the Cedarbrook - Whitemarsh 69 kV circuit by changing the CT ratio and replacing station cable at Whitemarsh 69 kV	PECO (100%)
b1768	Install 39 MVAR capacitor at Cromby 138 kV bus	PECO (100%)
b1900	Add a 3rd 230 kV transmission line between Chichester and Linwood substations and remove the Linwood SPS	PECO (69.62%) / JCPL (6.02%) / ATSI (1.23%) / PSEG (20.83%) / RE (0.83%) / NEPTUNE* (0.59%) / ECP** (0.45%) / HTP (0.43%)
b2140	Install a 3rd Emilie 230/138 kV transformer	PECO (97.04%) / ECP** (1.62%) / HTP (1.34%)
b2145	Replace two sections of conductor inside Richmond substation	PECO (100%)

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## SCHEDULE 12 – APPENDIX

### (9) PPL Electric Utilities Corporation

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0074	Rebuild 12 miles of S. Akron – Berks 230 kV to double circuit, looping Met Ed's S. Lebanon – S. Reading line into Berks; replacement of S. Reading 230 kV breaker 107252	PPL (100%)
b0171.2	Replace wavetrapp at Hosensack 500kV substation to increase rating of Elroy - Hosensack 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.78%) / DPL (6.88%) / JCPL (10.93%) / ME (2.74%) / NEPTUNE (0.27%) / PECO (48.97%) / PSEG (24.45%) / RE (0.98%)</u></p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0172.1	Replace wave trap at Alburdis 500kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)</u></p>
b0284.2	Replace two wave traps at Juniata 500 kV – on the two Juniata – Airydale 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.11%) / BGE (14.99%) / DL (0.25%) / ECP (0.76%) / HTP (0.70%) / JCPL (19.52%) / ME (11.95%) / NEPTUNE (2.12%) / PECO (19.24%) / PSEG (24.38%) / RE (0.98%)</u></p>
b0284.4	Changes at Juniata 500 kV substation	PPL (100%)
b0293.1	Replace wavetrap at the Martins Creek 230 kV bus	PPL (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0293.2	Raise the operating temperature of the 2-1590 ACSR to 140C for the Martins Creek – Portland 230 kV circuit		PPL (100%)
b0440	Spare Juniata 500/230 kV transformer		PPL (100%)
b0468	Build a new substation with two 150 MVA transformers between Dauphin and Hummelstown 230/69 kV substations by sectionalizing the Middletown Junction – New Lebanon 230 kV line		JCPL (4.55%) / Neptune* (0.37%) / PECO (1.79%) / PENELEC (0.33%) / PPL (86.63%) / ECP** (0.18%) / PSEG (5.93%) / RE (0.22%)
b0469	Install 130 MVAR capacitor at West Shore 230 kV line		PPL (100%)
b0487	Build new 500 kV transmission facilities from Susquehanna to Pennsylvania – New Jersey border at Bushkill		<u><b>Load-Ratio Share Allocation:</b></u> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<u><b>DFAX Allocation:</b></u> ECP (2.63%) / HTP (2.97%) / JCPL (30.22%) / NEPTUNE (3.81%) / PSEG (58.04%) / RE (2.33%)

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\*\*East Coast Power, L.L.C.

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The Annual Revenue Requirements associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-8G.

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0487.1	Install Lackawanna 500/230 kV transformer and upgrade 230 kV substation and switchyard	PENELEC (16.90%) / PPL (77.59%) / ECP** (0.19%) / PSEG (5.13%) / RE (0.19%)
b0500.1	Conastone – Otter Creek 230 kV – Reconductor approximately 17.2 miles of 795 kmil ACSR with new 795 kmil ACSS operated at 160 deg C	AEC (6.27%) / DPL (8.65%) / JCPL (14.54%) / ME (10.59%) / Neptune* (1.37%) / PECO (15.66%) / PPL (21.02%) / ECP** (0.57%) / PSEG (20.56%) / RE (0.77%)
b0558	Install 250 MVAR capacitor at Juniata 500 kV substation	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0593	Eldred – Pine Grove 69 kV line Rebuild Part 2: 8 miles	PPL (100%)
b0595	Rebuild Lackawanna – Edella 69 kV line to double circuit	PPL (100%)
b0596	Reconductor and rebuild Stanton – Providence 69 kV #1 and #2 lines with 69 kV design; approximately 8 miles total	PPL (100%)
b0597	Reconductor Suburban – Providence 69 kV #1 and resectionalize the Suburban 69 kV lines	PPL (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC



**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0598	Reconductor Suburban Taps #1 and #2 for 69 kV line portions		PPL (100%)
b0600	Tripp Park Substation: 69 kV tap off Stanton – Providence 69 kV line #3 to new substation		PPL (100%)
b0601	Jessup Substation: New 138/69 kV tap off of Peckville – Jackson 138/69 kV line		PPL (100%)
b0604	Add 150 MVA, 230/138/69 transformer #6 to Harwood substation		PPL (100%)
b0605	Reconductor Stanton – Old Forge 69 kV line and resectionalize the Jenkins – Scranton 69 kV #1 and #2 lines		PPL (100%)
b0606	New 138 kV tap off Monroe – Jackson 138 kV #1 line to Bartonsville substation		PPL (100%)
b0607	New 138 kV taps off Monroe – Jackson 138 kV lines to Stroudsburg substation		PPL (100%)
b0608	New 138 kV tap off Siegfried – Jackson 138 kV #2 to transformer #2 at Gilbert substation		PPL (100%)
b0610	At South Farmersville substation, a new 69 kV tap off Nazareth – Quarry #2 to transformer #2		PPL (100%)
b0612	Rebuild Siegfried – North Bethlehem portion (6.7 miles) of Siegfried – Quarry 69 kV line		PPL (100%)
b0613	East Tannersville Substation: New 138 kV tap to new substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0614	Elroy substation expansion and new Elroy – Hatfield 138/69 kV double circuit lines (1.9 miles)		PPL (100%)
b0615	Reconductor and rebuild 12 miles of Seidersville – Quakerstown 138/69 kV and a new 75 MVA, 230/69 kV transformer #4		PPL (100%)
b0616	New Springfield 230/69 kV substation and transmission line connections		PPL (100%)
b0620	New 138 kV line and terminal at Monroe 230/138 substation		PPL (100%)
b0621	New 138 kV line and terminal at Siegfried 230/138 kV substation and add a second circuit to Siegfried – Jackson for 8.0 miles		PPL (100%)
b0622	138 kV yard upgrades and transmission line rearrangements at Jackson 138/69 kV substation		PPL (100%)
b0623	New West Shore – Whitehill Taps 138/69 kV double circuit line (1.3 miles)		PPL (100%)
b0624	Reconductor Cumberland – Wertzville 69 kV portion (3.7 miles) of Cumberland – West Shore 69 kV line		PPL (100%)
b0625	Reconductor Mt. Allen – Rossmoyne 69 kV portions (1.6 miles) of West Shore – Cumberland #3 and #4 lines		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0627	Replace UG cable from Walnut substation to Center City Harrisburg substation for higher ampacity (0.25 miles)	PPL (100%)
b0629	Lincoln substation: 69 kV tap to convert to modified Twin A	PPL (100%)
b0630	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild from Landisville Tap – Mt. Joy (2 miles)	PPL (100%)
b0631	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild to double circuit from Mt. Joy – Donegal (2 miles)	PPL (100%)
b0632	Terminate new S. Manheim – Donegal 69 kV circuit into S. Manheim 69 kV #3	PPL (100%)
b0634	Rebuild S. Manheim – Fuller 69 kV portion (1.0 mile) of S. Manheim – West Hempfield 69 kV #3 line into a 69 kV double circuit	PPL (100%)
b0635	Reconductor Fuller Tap – Landisville 69 kV (4.1 miles) into a 69 kV double circuit	PPL (100%)
b0703	Berks substation modification on Berks – South Akron 230 kV line. Modification will isolate the line fault on the South Akron line and will allow Berks transformer #2 to be energized by the South Lebanon 230 kV circuit	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0705	New Derry – Millville 69 kV line		PPL (100%)
b0707	Construct Bohemia – Twin Lakes 69 kV line, install a 10.9 MVAR capacitor bank near Bohemia 69 kV substation		PPL (100%)
b0708	New 69 kV double circuit from Jackson – Lake Naomi Tap		PPL (100%)
b0709	Install new 69 kV double circuit from Carlisle – West Carlisle		PPL (100%)
b0710	Install a third 69 kV line from Reese’s Tap to Hershey substation		PPL (100%)
b0711	New 69 kV that taps West Shore – Cumberland 69 kV #1 to Whitehill 69 kV substation		PPL (100%)
b0712	Construct a new 69 kV line between Strassburg Tap and the Millwood – Engleside 69 kV #1 line		PPL (100%)
b0713	Construct a new 138 kV double circuit line between Dillersville Tap and the West Hempfield – Prince 138 kV line		PPL (100%)
b0714	Prepare Roseville Tap for 138 kV conversion		PPL (100%)
b0715	Transfer S. Akron – S. Manheim #1 and #2 lines from the S. Akron 69 kV Yard to the S. Akron 138 kV Yard; Install switches on S. Akron – S. Manheim 138 kV #1 and #2 lines		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0716	Add a second 69 kV line from Morgantown – Twin Valley		PPL (100%)
b0717	Rebuild existing Brunner Island – West Shore 230 kV line and add a second Brunner Island – West Shore 230 kV line		PPL (100%)
b0718	SPS scheme to drop 190 MVA of 69 kV radial load at West Shore and 56 MVA of 69 kV radial load at Cumberland		PPL (100%)
b0719	SPS scheme at Jenkins substation to open the Stanton #1 and Stanton #2 230 kV circuit breakers after the second contingency		PPL (100%)
b0791	Add a fourth 230/69 kV transformer at Stanton		PENELEC (9.55%) / PPL (90.45%)
b1074	Install motor operators on the Jenkins 230 kV ‘2W’ disconnect switch and build out Jenkins Bay 3 and have MOD ‘3W’ operated as normally open		PPL (100%)
b0881	Install motor operators on Susquehanna T21 - Susquehanna 230 kV line East CB at Susquehanna 230 kV switching station		PPL (100%)
b0908	Install motor operators at South Akron 230 kV		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0909	Convert Jenkins 230 kV yard into a 3-breaker ring bus		PPL (100%)
b0910	Install a second 230 kV line between Jenkins and Stanton		PPL (100%)
b0911	Install motor operators at Frackville 230 kV		PPL (100%)
b0912	Install 2, 10.8 MVAR capacitor banks at Scranton 69 kV		PPL (100%)
b0913	Extend Cando Tap to the Harwood-Jenkins #2 69 kV line		PPL (100%)
b0914	Build a 3rd 69 kV line from Harwood to Valmont Taps		PPL (100%)
b0915	Replace Walnut-Center City 69 kV cable		PPL (100%)
b0916	Reconductor Sunbury-Dalmatia 69 kV line		PPL (100%)
b1021	Install a new (#4) 138/69 kV transformer at Wescosville		PPL (100%)
b1196	Remove the Siegfried bus tie breaker and install a new breaker on the Martins Creek 230 kV line west bay to maintain two ties between the 230 kV buses		PPL (100%)
b1201	Rebuild the Hercules Tap to Double Circuit 69 kV		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1202	Mack-Macungie Double Tap, Single Feed Arrangement		PPL (100%)
b1203	Add the 2nd Circuit to the East Palmerton-Wagners-Lake Naomi 138/69 kV Tap		PPL (100%)
b1204	New Breinigsville 230-69 kV Substation		PPL (100%)
b1205	Siegfried-East Palmerton #1 69 kV Line- Install new 69 kV LSAB, Sectionalize, and Transfer Treichlers Substation		PPL (100%)
b1206	Siegfried-Quarry #1 & #2 69 kV Lines- Rebuild 3.3 mi from Quarry Substation to Macada Taps		PPL (100%)
b1209	Convert Neffsville Taps from 69 kV to 138 kV Operation		PPL (100%)
b1210	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 1 – operate on the 69 kV system)		PPL (100%)
b1211	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 2 – operate on the 138 kV system)		PPL (100%)
b1212	New 138 kV Taps to Flory Mill 138/69 kV Substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1213	Convert East Petersburg Taps from 69 kV to 138 kV operation, install two 10.8 MVAR capacitor banks	PPL (100%)
b1214	Terminate South Manheim-Donegal #2 at South Manheim, Reduce South Manheim 69 kV Capacitor Bank, Resectionalize 69 kV	PPL (100%)
b1215	Reconductor and rebuild 16 miles of Peckville-Varden 69 kV line and 4 miles of Blooming Grove-Honesdale 69 kV line	PPL (100%)
b1216	Build approximately 2.5 miles of new 69 kV transmission line to provide a “double tap – single feed” connection to Kimbles 69/12 kV substation	PPL (100%)
b1217	Provide a “double tap – single feed” connection to Tafton 69/12 kV substation	PPL (100%)
b1524	Build a new Pocono 230/69 kV substation	PPL (100%)
b1524.1	Build approximately 14 miles new 230 kV South Pocono – North Pocono line	PPL (100%)
b1524.2	Install MOLSABs at Mt. Pocono substation	PPL (100%)



**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1525	Build new West Pocono 230/69 kV Substation	PPL (100%)
b1525.1	Build approximately 14 miles new 230 kV Jenkins-West Pocono 230 kV Line	PPL (100%)
b1525.2	Install Jenkins 3E 230 kV circuit breaker	PPL (100%)
b1526	Install a new Honeybrook – Twin Valley 69/138 kV tie	PPL (100%)
b1527	Construct a new 230/69 kV North Lancaster substation. The sub will be supplied from the SAKR-BERK 230kV Line	PPL (100%)
b1527.1	Construct new 69/138 kV transmission from North Lancaster 230/69 kV sub to Brecknock and Honeybrook areas	PPL (100%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlerstown #1 & #2 69 kV lines at East Texas Substation	PPL (100%)
b1529	Add a double breaker 230 kV bay 3 at Hosensack	PPL (100%)
b1530	Replace Lock Haven 69kV ring bus with standard breaker and half design	PPL (100%)
b1532	Install new 32.4 MVAR capacitor bank at Sunbury	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1533	Rebuild Lycoming-Lock Haven #1 and Lycoming-Lock Haven #2 69kV lines		PPL (100%)
b1534	Rebuild 1.4 miles of the Sunbury-Milton 69kV		PPL (100%)
b1601	Re-configure the Breinigsville 500 kV substation with addition two 500 kV circuit breakers		AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)†
b1602	Re-configure the Elimsport 230 kV substation to breaker and half scheme and install 80 MVAR capacitor		PPL (100%)
b1740	Install a 90 MVAR cap bank on the Frackville 230 kV bus #207973		PPL (100%)
b1756	Install a 3rd West Shore 230/69 kV transformer		PPL (100%)
b1757	Install a 230 kV motor-operated air-break switch on the Clinton - Elimsport 230 kV line		PPL (100%)

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**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1758	Rebuild 1.65 miles of Columbia - Danville 69 kV line		PPL (100%)
b1759	Install a 69 kV 16.2 MVAR Cap at Milton substation		PPL (100%)
b1760	Install motor operated devices on the existing disconnect switches that are located on each side of all four 230 kV CBs at Stanton		PPL (100%)
b1761	Build a new Paupack - North 230 kV line (Approximately 21 miles)		PPL (100%)
b1762	Replace 3.7 miles of the existing 230 kV Blooming Grove - Peckville line by building 8.4 miles of new 230 kV circuit onto the Lackawanna - Hopatcong tower-line		PPL (100%)
b1763	Re-terminate the Peckville - Jackson and the Peckville - Varden 69 kV lines from Peckville into Lackawanna		PPL (100%)
b1764	Build a new 230-69 kV substations (Paupack)		PPL (100%)
b1765	Install a 16.2 MVAR capacitor bank at Bohemia 69-12 kV substation		PPL (100%)
b1766	Reconductor/rebuild 3.3 miles of the Siegfried - Quarry #1 and #2 lines		PPL (100%)
b1767	Install 6 motor-operated disconnect switches at Quarry substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1788	Install a new 500 kV circuit breaker at Wescosville		PPL (100%)
b1890	Add a second 230/69 kV transformer at North Pocono (NE/Pocono Reliability Project)		PPL (100%)
b1891	Build a new 230/138 kV Yard at Lackawanna (138 kV conversion from Lackawanna to Jenkins)		PPL (100%)
b1892	Rebuild the Throop Taps for 138 kV operation (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1893	Swap the Staton - Old Forge and Stanton - Brookside 69 kV circuits at Stanton (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1894	Rebuild and re-conductor 2.5 miles of the Stanton - Avoca 69 kV line		PPL (100%)
b1895	Rebuild and re-conductor 4.9 miles of the Stanton - Providence #1 69 kV line		PPL (100%)
b1896	Install a second 230/138 kV transformer and expand the 138 kV yard at Monroe		PPL (100%)
b1897	Build a new 230/138 kV substation at Jenkins (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1898	Install a 69 kV Tie Line between Richfield and Dalmatia substations		PPL (100%)
b2004	Replace the CTs and switch in South Akron Bay 4 to increase the rating		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2005	Replace the CTs and switch in SAKR Bay 3 to increase the rating of the Millwood-South Akron 230 kV Line and of the rating in Bay 3	PPL (100%)
b2006	Install North Lancaster 500/230 kV substation (below 500 kV portion)	AEC (1.10%) / ECP** (0.37%) / HTP (0.37%) / JCPL (9.61%) / ME (19.42%) / Neptune* (0.75%) / PECO (6.01%) / PPL (50.57%) / PSEG (11.35%) / RE (0.45%)
b2006.1	Install North Lancaster 500/230 kV substation (500 kV portion)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>ME (22.53%) / PPL (77.47%)</u></b></p>
b2007	Install a 90 MVAR capacitor bank at the Frackville 230 kV Substation	PPL (100%)
b2158	Install 10.8 MVAR capacitor at West Carlisle 69/12 kV substation	PPL (100%)

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\*\*\* Hudson Transmission Partners, LLC

## SCHEDULE 12 – APPENDIX

### (10) Potomac Electric Power Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0146	Installation of (2) new 230 kV circuit breakers at Quince Orchard substation on circuits 23028 and 23029	PEPCO (100%)
b0219	Install two new 230 kV circuits between Palmers Corner and Blue Plains	PEPCO (100%)
b0228	Upgrade Burtonsville – Sandy Springs 230 kV circuit	PEPCO (100%)
b0238.1	Modify Dickerson Station H 230 kV	PEPCO (100%)
b0251	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0252	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0288	Brighton Substation – add 2 <sup>nd</sup> 1000 MVA 500/230 kV transformer, 2 500 kV circuit breakers and miscellaneous bus work	BGE (19.33%) / Dominion (17%) / PEPCO (63.67%)
b0319	Add a second 1000 MVA Bruches Hill 500/230 kV transformer	PEPCO (100%)
b0366	Install a 4 <sup>th</sup> Ritchie 230/69 kV transformer	PEPCO (100%)

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The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.

# **Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0367.1	Reconductor circuit “23035” for Dickerson – Quince Orchard 230 kV	AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)
b0367.2	Reconductor circuit “23033” for Dickerson – Quince Orchard 230 kV	AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)
b0375	Install 0.5% reactor at Dickerson on the Pleasant View – Dickerson 230 kV circuit	AEC (1.02%) / BGE (25.42%) / DPL (2.97%) / ME (1.72%) / PECO (3.47%) / PEPCO (65.40%)
b0467.1	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.54%) / PEPCO (41.86%) / PPL (2.07%)
b0478	Reconductor the four circuits from Burches Hill to Palmers Corner	APS (1.68%) / BGE (1.83%) / PEPCO (96.49%)
b0496	Replace existing 500/230 kV transformer at Brighton	APS (5.67%) / BGE (29.68%) / Dominion (10.91%) / PEPCO (53.74%)
b0499	Install third Burches Hill 500/230 kV transformer	APS (3.54%) / BGE (7.31%) / PEPCO (89.15%)

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The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.7	Advance n0772 (Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.8	Advance n0773 (Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.9	Advance n0774 (Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.10	Advance n0775 (Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.11	Advance n0776 (Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.12	Advance n0777 (Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.13	Advance n0778 (Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.14	Advance n0779 (Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.15	Advance n0780 (Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.16	Advance n0781 (Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.17	Advance n0782 (Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.18	Advance n0783 (Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.19	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.20	Advance n0785 (Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.21	Advance n0786 (Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.22	Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.23	Advance n0788 (Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.24	Advance n0789 (Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.25	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.26	Advance n0791 (Replace Chalk Point 230 Kv breaker (4C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.27	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.28	Advance n0793 (Replace Chalk Point 230 Kv breaker (6C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>
b0512.29	Advance n0794 (Replace Chalk Point 230 Kv breaker (7C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C

\*\*\* Hudson Transmission Partners, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0526	Build two Ritchie – Benning Station A 230 kV lines	AEC (0.77%) / BGE (16.76%) / DPL (1.22%) / JCPL (1.39%) / ME (0.59%) / Neptune* (0.13%) / PECO (2.10%) / PEPCO (74.86%) / PSEG (2.10%) / RE (0.08%)
b0561	Install 300 MVAR capacitor at Dickerson Station “D” 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0562	Install 500 MVAR capacitor at Brighton 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0637	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0638	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0639	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0640	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0641	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0642	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0643	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0644	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0645	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0646	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0647	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0648	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0649	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0701	Expand Benning 230 kV station, add a new 250 MVA 230/69 kV transformer at Benning Station 'A', new 115 kV Benning switching station	BGE (30.57%) / PEPCO (69.43%)
b0702	Add a second 50 MVAR 230 kV shunt reactor at the Benning 230 kV substation	PEPCO (100%)
b0720	Upgrade terminal equipment on both lines	PEPCO (100%)
b0721	Upgrade Oak Grove – Ritchie 23061 230 kV line	PEPCO (100%)
b0722	Upgrade Oak Grove – Ritchie 23058 230 kV line	PEPCO (100%)
b0723	Upgrade Oak Grove – Ritchie 23059 230 kV line	PEPCO (100%)
b0724	Upgrade Oak Grove – Ritchie 23060 230 kV line	PEPCO (100%)
b0730	Add slow oil circulation to the four Bells Mill Road – Bethesda 138 kV lines, add slow oil circulation to the two Buzzard Point – Southwest 138 kV lines; increasing the thermal ratings of these six lines allows for greater adjustment of the O Street phase shifters	PEPCO (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0731	Implement an SPS to automatically shed load on the 34 kV Bells Mill Road bus for this N-2 condition. The SPS will be in effect for 2013 and 2014 until a third Bells Mill 230/34 kV is placed in-service in 2015	PEPCO (100%)
b0746	Upgrade circuit for 3,000 amps using the ACCR	AEC (0.73%) / BGE (31.05%) / DPL (1.45%) / PECO (2.46%) / PEPCO (62.88%) / PPL (1.43%)
b0747	Upgrade terminal equipment on both lines: Quince Orchard - Bells Mill 230 kV (030) and (028)	PEPCO (100%)
b0802	Advance n0259 (Replace Dickerson Station H Circuit Breaker 412A)	PEPCO (100%)
b0803	Advance n0260 (Replace Dickerson Station H Circuit Breaker 42A)	PEPCO (100%)
b0804	Advance n0261 (Replace Dickerson Station H Circuit Breaker 42C)	PEPCO (100%)
b0805	Advance n0262 (Replace Dickerson Station H Circuit Breaker 43A)	PEPCO (100%)
b0806	Advance n0264 (Replace Dickerson Station H Circuit Breaker 44A)	PEPCO (100%)

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\*\* East Coast Power, L.L.C.

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0809	Advance n0267 (Replace Dickerson Station H Circuit Breaker 45B)	PEPCO (100%)
b0810	Advance n0270 (Replace Dickerson Station H Circuit Breaker 47A)	PEPCO (100%)
b0811	Advance n0726 (Replace Dickerson Station H Circuit Breaker SPARE )	PEPCO (100%)
b0845	Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker	PEPCO (100%)
b0846	Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker	PEPCO (100%)
b0847	Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker	PEPCO (100%)
b0848	Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker	PEPCO (100%)
b0849	Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker	PEPCO (100%)
b0850	Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker	PEPCO (100%)
b0851	Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker	PEPCO (100%)
b0852	Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker	PEPCO (100%)
b0853	Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker	PEPCO (100%)
b0854	Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker	PEPCO (100%)
b0855	Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker	PEPCO (100%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0856	Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker		PEPCO (100%)
b0857	Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker		PEPCO (100%)
b0858	Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker		PEPCO (100%)
b0859	Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker		PEPCO (100%)
b0860	Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker		PEPCO (100%)
b0861	Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker		PEPCO (100%)
b0862	Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker		PEPCO (100%)
b0863	Replace Chalk Point 230 kV breaker (1C) with 80 kA breaker		PEPCO (100%)
b1104	Replace Burtonsville 230 kV breaker '1C'		PEPCO (100%)
b1105	Replace Burtonsville 230 kV breaker '2C'		PEPCO (100%)
b1106	Replace Burtonsville 230 kV breaker '3C'		PEPCO (100%)
b1107	Replace Burtonsville 230 kV breaker '4C'		PEPCO (100%)
b1125	Convert the 138 kV line from Buzzard 138 - Ritchie 851 to a 230 kV line and Remove 230/138 kV Transformer at Ritchie and install a spare 230/138 kV transformer at Buzzard Pt		APS (4.74%) / PEPCO (95.26%)
b1126	Upgrade the 230 kV line from Buzzard 016 – Ritchie 059		APS (4.74%) / PEPCO (95.26%)



**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1592	Reconductor the Oak Grove – Bowie 230 kV circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1593	Reconductor the Bowie - Burtonsville 230 kV circuit and upgrade terminal equipments at Bowie and Burtonsville 230 kV substations		AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1594	Reconductor the Oak Grove – Bowie 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1595	Reconductor the Bowie – Burtonsville 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Burtonsville 230 kV substations		AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1596	Reconductor the Dickerson station “H” – Quince Orchard 230 kV ‘23032’ circuit and upgrade terminal equipments at Dickerson station “H” and Quince Orchard 230 kV substations		AEC (0.80%) / BGE (33.68%) / DPL (2.09%) / PECO (3.07%) / PEPCO (60.36%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1597	Reconductor the Oak Grove - Aquasco 230 kV '23062' circuit and upgrade terminal equipments at Oak Grove and Aquasco 230 kV substations		AEC (1.44%) / BGE (48.60%) / DPL (2.52%) / PECO (5.00%) / PEPCO (42.44%)
b2008	Reconductor feeder 23032 and 23034 to high temp. conductor (10 miles)		BGE (33.05%) / DPL (1.38%) / PECO (1.35%) / PEPCO (64.22%) /
b2136	Reconductor the Morgantown - V3-017 230 kV '23086' circuit and replace terminal equipments at Morgantown		PEPCO (100%)
b2137	Reconductor the Morgantown - Talbert 230 kV '23085' circuit and replace terminal equipment at Morgantown		PEPCO (100%)
b2138	Replace terminal equipments at Hawkins 230 kV substation		PEPCO (100%)

## SCHEDULE 12 – APPENDIX

### (12) Public Service Electric and Gas Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0025	Convert the Bergen-Leonia 138 Kv circuit to 230 kV circuit.	PSEG (100%)
b0090	Add 150 MVAR capacitor at Camden 230 kV	PSEG (100%)
b0121	Add 150 MVAR capacitor at Aldene 230 kV	PSEG (100%)
b0122	Bypass the Essex 138 kV series reactors	PSEG (100%)
b0125	Add Special Protection Scheme at Bridgewater to automatically open 230 kV breaker for outage of Branchburg – Deans 500 kV and Deans 500/230 kV #1 transformer	PSEG (100%)
b0126	Replace wavetrap on Branchburg – Flagtown 230 kV	PSEG (100%)
b0127	Replace terminal equipment to increase Brunswick – Adams – Bennetts Lane 230 kV to conductor rating	PSEG (100%)
b0129	Replace wavetrap on Flagtown – Somerville 230 kV	PSEG (100%)
b0130	Replace all derated Branchburg 500/230 kV transformers	AEC (1.36%) / JCPL (47.76%) / PSEG (50.88%)
b0134	Upgrade or Retension PSEG portion of Kittatinny – Newton 230 kV circuit	JCPL (51.11%) / PSEG (45.96%) / RE (2.93%)

The Annual Revenue Requirement for all Public Service Electric and Gas Company Projects (Required Transmission Enhancements) in this Section 12 shall be as specified in Attachment 7 of Attachment H-10A and under the procedures detailed in Attachment H-10B.

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0145	Build new Essex – Aldene 230 kV cable connected through a phase angle regulator at Essex		PSEG (21.78%) / JCPL (73.45%) / RE (4.77%)
b0157	Add 100MVAR capacitor at West Orange 138kV substation		PSEG (100%)
b0158	Close the Sunnymeade "C" and "F" bus tie		PSEG (100%)
b0159	Make the Bayonne reactor permanent installation		PSEG (100%)
b0160	Relocate the X-2250 circuit from Hudson 1-6 bus to Hudson 7-12 bus		PSEG (100%)
b0161	Install 230/138kV transformer at Metuchen substation		PSEG (99.80%) / RE (0.20%)
b0162	Upgrade the Edison – Meadow Rd 138kV “Q” circuit		PSEG (100%)
b0163	Upgrade the Edison – Meadow Rd 138kV “R” circuit		PSEG (100%)
b0169	Build a new 230 kV section from Branchburg – Flagtown and move the Flagtown – Somerville 230 kV circuit to the new section		AEC (1.72%) / JCPL (25.94%) / Neptune* (10.62%) / PSEG (59.59%) / ECP** (2.13%)
b0170	Reconductor the Flagtown-Somerville-Bridgewater 230 kV circuit with 1590 ACSS		JCLP (42.95%) / Neptune* (17.90%) / PSEG (38.36%) RE (0.79%)

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\*\* East Coast Power, L.L.C.

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0172.2	Replace wave trap at Branchburg 500kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)</u></p>
b0184	Replace Hudson 230kV circuit breakers #1-2	PSEG (100%)
b0185	Replace Deans 230kV circuit breakers #9-10	PSEG (100%)
b0186	Replace Essex 230kV circuit breaker #5-6	PSEG (100%)
b1082	Install 230/138 kV transformer at Bergen substation	PENELEC (16.52%) / PSEG (80.29%) / RE (3.19%)

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\*\* East Coast Power, L.L.C.

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0201	Branchburg substation: replace wave trap on Branchburg – Readington 230 kV circuit	PSEG (100%)
b0213.1	Replace New Freedom 230 kV breaker BS2-6	PSEG (100%)
b0213.3	Replace New Freedom 230 kV breaker BS2-8	PSEG (100%)
b0274	Replace both 230/138 kV transformers at Roseland	PSEG (96.77%) / ECP** (3.23%)
b0275	Upgrade the two 138 kV circuits between Roseland and West Orange	PSEG (100%)
b0278	Install 228 MVAR capacitor at Roseland 230 kV substation	PSEG (100%)
b0290	Install 400 MVAR capacitor in the Branchburg 500 kV vicinity	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)</u>
b0358	Reconductor the PSEG portion of Buckingham – Pleasant Valley 230 kV, replace wave trap and metering transformer	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0368	Reconductor Tosco – G22_MTX 230 kV circuit with 1033 bundled ACSS	PSEG (100%)
b0371	Make the Metuchen 138 kV bus solid and upgrade 6 breakers at the Metuchen substation	PSEG (100%)
b0372	Make the Athenia 138 kV bus solid and upgrade 2 breakers at the Athenia substation	PSEG (100%)
b0395	Replace Hudson 230 kV breaker BS4-5	PSEG (100%)
b0396	Replace Hudson 230 kV breaker BS1-6	PSEG (100%)
b0397	Replace Hudson 230 kV breaker BS3-4	PSEG (100%)
b0398	Replace Hudson 230 kV breaker BS5-6	PSEG (100%)
b0401.1	Replace Roseland 230 kV breaker BS6-7	PSEG (100%)
b0401.2	Replace Roseland 138 kV breaker O-1315	PSEG (100%)
b0401.3	Replace Roseland 138 kV breaker S-1319	PSEG (100%)
b0401.4	Replace Roseland 138 kV breaker T-1320	PSEG (100%)
b0401.5	Replace Roseland 138 kV breaker G-1307	PSEG (100%)
b0401.6	Replace Roseland 138 kV breaker P-1316	PSEG (100%)
b0401.7	Replace Roseland 138 kV breaker 220-4	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0401.8	Replace W. Orange 138 kV breaker 132-4	PSEG (100%)
b0411	Install 4 <sup>th</sup> 500/230 kV transformer at New Freedom	AEC (47.01%) / JCPL (7.04%) / Neptune* (0.28%) / PECO (23.36%) / PSEG (22.31%)
b0423	Reconductor Readington (2555) – Branchburg (4962) 230 kV circuit w/1590 ACSS	PSEG (100%)
b0424	Replace Readington wavetrapp on Readington (2555) – Roseland (5017) 230 kV circuit	PSEG (100%)
b0425	Reconductor Linden (4996) – Tosco (5190) 230 kV circuit w/1590 ACSS (Assumes operating at 220 degrees C)	PSEG (100%)
b0426	Reconductor Tosco (5190) – G22_MTX5 (90220) 230 kV circuit w/1590 ACSS (Assumes operation at 220 degrees C)	PSEG (100%)
b0427	Reconductor Athenia (4954) – Saddle Brook (5020) 230 kV circuit river section	PSEG (100%)
b0428	Replace Roseland wavetrapp on Roseland (5019) – West Caldwell “G” (5089) 138 kV circuit	PSEG (100%)
b0429	Reconductor Kittatinny (2553) – Newton (2535) 230 kV circuit w/1590 ACSS	JCPL (41.91%) / Neptune* (3.59%) / PSEG (50.59%) / RE (2.23%) / ECP** (1.68%)
b0439	Spare Deans 500/230 kV transformer	PSEG (100%)
b0446.1	Upgrade Bayway 138 kV breaker #2-3	PSEG (100%)
b0446.2	Upgrade Bayway 138 kV breaker #3-4	PSEG (100%)



**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0446.3	Upgrade Bayway 138 kV breaker #6-7	PSEG (100%)
b0446.4	Upgrade the breaker associated with TX 132-5 on Linden 138 kV	PSEG (100%)
b0470	Install 138 kV breaker at Roseland and close the Roseland 138 kV buses	PSEG (100%)
b0471	Replace the wave traps at both Lawrence and Pleasant Valley on the Lawrence – Pleasant Vallen 230 kV circuit	PSEG (100%)
b0472	Increase the emergency rating of Saddle Brook – Athenia 230 kV by 25% by adding forced cooling	ECP (2.06%) / PSEG (94.41%) / RE (3.53%)
b0473	Move the 150 MVAR mobile capacitor from Aldene 230 kV to Lawrence 230 kV substation	PSEG (100%)
b0489	Build new 500 kV transmission facilities from Pennsylvania – New Jersey border at Bushkill to Roseland	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)†
		<b><u>DFAX Allocation:</u></b> <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u>

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\*\* East Coast Power, L.L.C.

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† Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

†† Cost allocations associated with below 500 kV elements of the project

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b489.1	Replace Athenia 230 kV breaker 31H		PSEG (100%)
b489.2	Replace Bergen 230 kV breaker 10H		PSEG (100%)
b489.3	Replace Saddlebrook 230 kV breaker 21P		PSEG (100%)
b0489.4	Install two Roseland 500/230 kV transformers as part of the Susquehanna – Roseland 500 kV project		AEC (5.09%) / ComEd (0.29%) / Dayton (0.03%) / DPL (1.76%) / JCPL (32.73%) / Neptune* (6.32%) / PECO (10.04%) / PENELEC (0.56%) / ECP** (0.95%) / PSEG (40.71%) / RE (1.52%) ††
b0489.5	Replace Roseland 230 kV breaker '42H' with 80 kA		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.6	Replace Roseland 230 kV breaker '51H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  ECP (2.86%) / HTP (3.79%) / JCPL  (35.20%) / NEPTUNE (3.38%) /  PSEG (52.66%) / RE (2.11%)</p>
b0489.7	Replace Roseland 230 kV breaker '71H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  ECP (2.86%) / HTP (3.79%) / JCPL  (35.20%) / NEPTUNE (3.38%) /  PSEG (52.66%) / RE (2.11%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.8	Replace Roseland 230 kV breaker '31H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%)  / Dayton (2.12%) / DEOK  (3.37%) / DL (1.77%) / DPL  (2.62%) / Dominion (12.39%) /  EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) /</u>  <u>JCPL (35.20%) / NEPTUNE</u>  <u>(3.38%) / PSEG (52.66%) / RE</u>  <u>(2.11%)</u></p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.9	Replace Roseland 230 kV breaker '11H' with 80 kA	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u>
b0489.10	Replace Roseland 230 kV breaker '21H'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.11	Replace Roseland 230 kV breaker '32H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u></p>
b0489.12	Replace Roseland 230 kV breaker '12H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u></p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.13	Replace Roseland 230 kV breaker '52H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u></p>
b0489.14	Replace Roseland 230 kV breaker '41H'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</u></p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.15	Replace Roseland 230 kV breaker '72H'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>ECP (2.86%) / HTP (3.79%) / JCPL</u> <u>(35.20%) / NEPTUNE (3.38%) /</u> <u>PSEG (52.66%) / RE (2.11%)</u>
b0498	Loop the 5021 circuit into New Freedom 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (15.37%) / ECP (1.25%) /</u> <u>HTP (1.05%) / JCPL (28.13%) /</u> <u>NEPTUNE (3.27%) / PSEG</u> <u>(48.97%) / RE (1.96%)</u>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0498.1	Upgrade the 20H circuit breaker		PSEG (100%)
b0498.2	Upgrade the 22H circuit breaker		PSEG (100%)
b0498.3	Upgrade the 30H circuit breaker		PSEG (100%)
b0498.4	Upgrade the 32H circuit breaker		PSEG (100%)
b0498.5	Upgrade the 40H circuit breaker		PSEG (100%)
b0498.6	Upgrade the 42H circuit breaker		PSEG (100%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0565	Install 100 MVAR capacitor at Cox's Corner 230 kV substation		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0578	Replace Essex 138 kV breaker 4LM (C1355 line to ECRRF)		PSEG (100%)
b0579	Replace Essex 138 kV breaker 1LM (220-1 TX)		PSEG (100%)
b0580	Replace Essex 138 kV breaker 1BM (BS1-3 tie)		PSEG (100%)
b0581	Replace Essex 138 kV breaker 2BM (BS3-4 tie)		PSEG (100%)
b0582	Replace Linden 138 kV breaker 3 (132-7 TX)		PSEG (100%)
b0592	Replace Metuchen 138 kV breaker '2-2 Transfer'		PSEG (100%)
b0664	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0665	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0668	Reconductor with 2x1033 ACSS conductor		JCPL (39.41%) / NEPTUNE* (20.38%) / PSEG (38.76%) / RE (1.45%)
b0671	Replace terminal equipment at both ends of line		PSEG (100%)
b0743	Add a bus tie breaker at Roseland 138 kV		PSEG (100%)
b0812	Increase operating temperature on line for one year to get 925E MVA rating		PSEG (100%)
b0813	Reconductor Hudson – South Waterfront 230 kV circuit		BGE (1.25%) / JCPL (9.92%) / NEPTUNE* (0.87%) / PEPCO (1.11%) / PSEG (83.73%) / RE (3.12%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0814	New Essex – Kearney 138 kV circuit and Kearney 138 kV bus tie		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.1	Replace Kearny 138 kV breaker '1-SHT' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.2	Replace Kearny 138 kV breaker '15HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.3	Replace Kearny 138 kV breaker '14HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.4	Replace Kearny 138 kV breaker '10HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.5	Replace Kearny 138 kV breaker '2HT' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.6	Replace Kearny 138 kV breaker '22HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.7	Replace Kearny 138 kV breaker '4HT' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.8	Replace Kearny 138 kV breaker '25HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.9	Replace Essex 138 kV breaker '2LM' with 63 kA breaker and 2.5 cycle contact parting time		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.10	Replace Essex 138 kV breaker '1BT' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.11	Replace Essex 138 kV breaker '2PM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.12	Replace Marion 138 kV breaker '2HM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.13	Replace Marion 138 kV breaker '2LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.14	Replace Marion 138 kV breaker '1LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.15	Replace Marion 138 kV breaker '6PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.16	Replace Marion 138 kV breaker '3PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.17	Replace Marion 138 kV breaker '4LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0814.18	Replace Marion 138 kV breaker '3LM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.19	Replace Marion 138 kV breaker '1HM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.20	Replace Marion 138 kV breaker '2PM3' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.21	Replace Marion 138 kV breaker '2PM1' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.22	Replace ECRR 138 kV breaker '903'		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.23	Replace Foundry 138 kV breaker '21P'		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.24	Change the contact parting time on Essex 138 kV breaker '3LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.25	Change the contact parting time on Essex 138 kV breaker '2BM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0814.26	Change the contact parting time on Essex 138 kV breaker '1BM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.27	Change the contact parting time on Essex 138 kV breaker '3PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.28	Change the contact parting time on Essex 138 kV breaker '4LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.29	Change the contact parting time on Essex 138 kV breaker '1PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.30	Change the contact parting time on Essex 138 kV breaker '1LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0829	Build Branchburg to Roseland 500 kV circuit as part of Branchburg – Hudson 500 kV project	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0829.6	Replace Branchburg 500 kV breaker 91X	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <b><u>PSEG (96.14%) / RE (3.86%)</u></b>
b0829.9	Replace Branchburg 230 kV breaker 102H	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0829.11	Replace Branchburg 230 kV breaker 32H		PSEG (100%)
b0829.12	Replace Branchburg 230 kV breaker 52H		PSEG (100%)
b0830	Build Roseland - Hudson 500 kV circuit as part of Branchburg – Hudson 500 kV project		AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0830.1	Replace Roseland 230 kV breaker '82H' with 80 kA		PSEG (100%)
b0830.2	Replace Roseland 230 kV breaker '91H' with 80 kA		PSEG (100%)
b0830.3	Replace Roseland 230 kV breaker '22H' with 80 kA		PSEG (100%)

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# Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0831	Replace 138/13 kV transformers with 230/13 kV units as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0832	Build Hudson 500 kV switching station as part of Branchburg – Hudson 500 kV project	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0833	Build Roseland 500 kV switching station as part of Branchburg – Hudson 500 kV project	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0834	Convert the E-1305/F-1306 to one 230 kV circuit as part of Branchburg – Hudson 500 kV project		ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0835	Build Hudson 230 kV transmission lines as part of Roseland – Hudson 500 kV project as part of Branchburg – Hudson 500 kV project		ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0836	Install transformation at new Hudson 500 kV switching station and perform Hudson 230 kV and 345 kV station work as part of Branchburg – Hudson 500 kV project		ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0882	Replace Hudson 230 kV breaker 1HA with 80 kA		PSEG (100%)
b0883	Replace Hudson 230 kV breaker 2HA with 80 kA		PSEG (100%)
b0884	Replace Hudson 230 kV breaker 3HB with 80 kA		PSEG (100%)
b0885	Replace Hudson 230 kV breaker 4HA with 80 kA		PSEG (100%)
b0886	Replace Hudson 230 kV breaker 4HB with 80 kA		PSEG (100%)
b0889	Replace Bergen 230 kV breaker '21H'		PSEG (100%)
b0890	Upgrade New Freedom 230 kV breaker '21H'		PSEG (100%)
b0891	Upgrade New Freedom 230 kV breaker '31H'		PSEG (100%)
b0899	Replace ECRR 138 kV breaker 901		PSEG (100%)
b0900	Replace ECRR 138 kV breaker 902		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1013	Replace Linden 138 kV breaker '7PB'	PSEG (100%)
b1017	Reconductor South Mahwah - Waldwick 345 kV J-3410 circuit	JCPL (29.01%) / NEPTUNE* (2.74%) / PSEG (64.85%) / RE (2.53%) / ECP** (0.87%)
b1018	Reconductor South Mahwah - Waldwick 345 kV K-3411 circuit	JCPL (29.18%) / NEPTUNE* (2.74%) / PSEG (64.68%) / RE (2.53%) / ECP** (0.87%)
b1019.1	Replace wave trap, line disconnect and ground switch at Roseland on the F-2206 circuit	PSEG (100%)
b1019.2	Replace wave trap, line disconnect and ground switch at Roseland on the B-2258 circuit	PSEG (100%)
b1019.3	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the F-2206 circuit	PSEG (100%)
b1019.4	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the B-2258 circuit	PSEG (100%)
b1019.5	Replace wave trap, line disconnect and ground switch at Cedar Grove on the F-2206 circuit	PSEG (100%)
b1019.6	Replace line disconnect and ground switch at Cedar Grove on the K-2263 circuit	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1019.7	Replace 2-4 and 4-5 section disconnect and ground switches at Clifton on the B-2258 circuit		PSEG (100%)
b1019.8	Replace 1-2 and 2-3 section disconnect and ground switches at Clifton on the K-2263 circuit		PSEG (100%)
b1019.9	Replace line, ground, 230 kV main bus disconnects at Athenia on the B-2258 circuit		PSEG (100%)
b1019.10	Replace wave trap, line, ground 230 kV breaker disconnect and 230 kV main bus disconnects at Athenia on the K-2263 circuit		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1082.1	Replace Bergen 138 kV breaker '30P' with 80 kA		PSEG (100%)
b1082.2	Replace Bergen 138 kV breaker '80P' with 80 kA		PSEG (100%)
b1082.3	Replace Bergen 138 kV breaker '70P' with 80 kA		PSEG (100%)
b1082.4	Replace Bergen 138 kV breaker '90P' with 63 kA		PSEG (100%)
b1082.5	Replace Bergen 138 kV breaker '50P' with 63 kA		PSEG (100%)
b1082.6	Replace Bergen 230 kV breaker '12H' with 80 kA		PSEG (100%)
b1082.7	Replace Bergen 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1082.8	Replace Bergen 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1082.9	Replace Bergen 230 kV breaker '20H' with 80 kA		PSEG (100%)
b1098	Re-configure the Bayway 138 kV substation and install three new 138 kV breakers		PSEG (100%)
b1099	Build a new 230 kV substation by tapping the Aldene – Essex circuit and install three 230/26 kV transformers, and serve some of the Newark area load from the new station		PSEG (100%)
b1100	Build a new 138 kV circuit from Bayonne to Marion		PSEG (100%)
b1101	Re-configure the Cedar Grove substation with breaker and half scheme and build a new 69 kV circuit from Cedar Grove to Hinchman		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1154	Convert the West Orange 138 kV substation, the two Roseland – West Orange 138 kV circuits, and the Roseland – Sewaren 138 kV circuit from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1155	Build a new 230 kV circuit from Branchburg to Middlesex Sw. Rack. Build a new 230 kV substation at Middlesex		JCPL (4.61%) / PSEG (91.75%) / RE (3.64%)
b1155.3	Replace Branchburg 230 kV breaker '81H' with 63 kA		PSEG (100%)
b1155.4	Replace Branchburg 230 kV breaker '72H' with 63 kA		PSEG (100%)
b1155.5	Replace Branchburg 230 kV breaker '61H' with 63 kA		PSEG (100%)
b1155.6	Replace Branchburg 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156	Convert the Burlington, Camden, and Cuthbert Blvd 138 kV substations, the 138 kV circuits from Burlington to Camden, and the 138 kV circuit from Camden to Cuthbert Blvd. from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1156.13	Replace Camden 230 kV breaker '22H' with 80 kA		PSEG (100%)
b1156.14	Replace Camden 230 kV breaker '32H' with 80 kA		PSEG (100%)
b1156.15	Replace Camden 230 kV breaker '21H' with 80 kA		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1156.16	Replace New Freedom 230 kV breaker '50H' with 63 kA		PSEG (100%)
b1156.17	Replace New Freedom 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156.18	Replace New Freedom 230 kV breaker '51H' with 63 kA		PSEG (100%)
b1156.19	Rebuild Camden 230 kV to 80 kA		PSEG (100%)
b1156.20	Rebuild Burlington 230 kV to 80 kA		PSEG (100%)
b1197.1	Reconductor the PSEG portion of the Burlington – Croydon circuit with 1590 ACSS		PSEG (100%)
b1228	Re-configure the Lawrence 230 kV substation to breaker and half		HTP (0.14%) / ECP (0.22%) / PSEG (95.83%) / RE (3.81%)
b1255	Build a new 69 kV substation (Ridge Road) and build new 69 kV circuits from Montgomery – Ridge Road – Penns Neck/Dow Jones		PSEG (96.18%) / RE (3.82%)
b1304.1	Convert the existing 'D1304' and 'G1307' 138 kV circuits between Roseland – Kearny – Hudson to 230 kV operation		AEC (0.23%) / BGE (0.97%) / ComEd (2.32%) / Dayton (0.13%) / JCPL (1.17%) / Neptune (0.07%) / HTP (16.05%) / PENELEC (2.97%) / PEPCO (1.04%) / ECP (2.11%) / PSEG (70.16%) / RE (2.78%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1304.2	Expand existing Bergen 230 kV substation and reconfigure the Athenia 230 kV substation to breaker and a half scheme	AEC (0.23%) / BGE (0.97%) / ComEd (2.32%) / Dayton (0.13%) / JCPL (1.17%) / Neptune (0.07%) / HTP (16.05%) / PENELEC (2.97%) / PEPCO (1.04%) / ECP (2.11%) / PSEG (70.16%) / RE (2.78%)
b1304.3	Build second 230 kV underground cable from Bergen to Athenia	AEC (0.23%) / BGE (0.97%) / ComEd (2.32%) / Dayton (0.13%) / JCPL (1.17%) / Neptune (0.07%) / HTP (16.05%) / PENELEC (2.97%) / PEPCO (1.04%) / ECP (2.11%) / PSEG (70.16%) / RE (2.78%)
b1304.4	Build second 230 kV underground cable from Hudson to South Waterfront	AEC (0.23%) / BGE (0.97%) / ComEd (2.32%) / Dayton (0.13%) / JCPL (1.17%) / Neptune (0.07%) / HTP (16.05%) / PENELEC (2.97%) / PEPCO (1.04%) / ECP (2.11%) / PSEG (70.16%) / RE (2.78%)



**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.5	Replace Athenia 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.6	Replace Athenia 230 kV breaker '41H' with 80 kA		PSEG (100%)
b1304.7	Replace South Waterfront 230 kV breaker '12H' with 80 kA		PSEG (100%)
b1304.8	Replace South Waterfront 230 kV breaker '22H' with 80 kA		PSEG (100%)
b1304.9	Replace South Waterfront 230 kV breaker '32H' with 80 kA		PSEG (100%)
b1304.10	Replace South Waterfront 230 kV breaker '52H' with 80 kA		PSEG (100%)
b1304.11	Replace South Waterfront 230 kV breaker '62H' with 80 kA		PSEG (100%)
b1304.12	Replace South Waterfront 230 kV breaker '72H' with 80 kA		PSEG (100%)
b1304.13	Replace South Waterfront 230 kV breaker '82H' with 80 kA		PSEG (100%)
b1304.14	Replace Essex 230 kV breaker '20H' with 80 kA		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.15	Replace Essex 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.16	Replace Essex 230 kV breaker '10H' with 80 kA		PSEG (100%)
b1304.17	Replace Essex 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1304.18	Replace Essex 230 kV breaker '11HL' with 80 kA		PSEG (100%)
b1304.19	Replace Newport R 230 kV breaker '23H' with 63 kA		PSEG (100%)
b1304.20	Rebuild Athenia 230 kV substation to 80 kA		PSEG (100%)
b1304.21	Rebuild Bergen 230 kV substation to 80 kA		PSEG (100%)
b1398	Build two new parallel underground circuits from Gloucester to Camden		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.1	Install shunt reactor at Gloucester to offset cable charging		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.2	Reconfigure the Cuthbert station to breaker and a half scheme		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.3	Build a second 230 kV parallel overhead circuit from Mickelton – Gloucester		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.4	Reconductor the existing Mickleton – Gloucester 230 kV circuit (PSEG portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.7	Reconductor the Camden – Richmond 230 kV circuit (PSEG portion) and upgrade terminal equipments at Camden substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.15	Replace Gloucester 230 kV breaker '21H' with 63 kA	PSEG (100%)
b1398.16	Replace Gloucester 230 kV breaker '51H' with 63 kA	PSEG (100%)
b1398.17	Replace Gloucester 230 kV breaker '56H' with 63 kA	PSEG (100%)
b1398.18	Replace Gloucester 230 kV breaker '26H' with 63 kA	PSEG (100%)
b1398.19	Replace Gloucester 230 kV breaker '71H' with 63 kA	PSEG (100%)
b1399	Convert the 138 kV path from Aldene – Springfield Rd. – West Orange to 230 kV	PSEG (96.18%) / RE (3.82%)
b1400	Install 230 kV circuit breakers at Bennetts Ln. “F” and “X” buses	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1410	Replace Salem 500 kV breaker '11X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>
b1411	Replace Salem 500 kV breaker '12X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1412	Replace Salem 500 kV breaker '20X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>
b1413	Replace Salem 500 kV breaker '21X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1414	Replace Salem 500 kV breaker '31X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>
b1415	Replace Salem 500 kV breaker '32X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.14%) / RE (3.86%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1539	Replace Tosco 230 kV breaker 'CB1' with 63 kA		PSEG (100%)
b1540	Replace Tosco 230 kV breaker 'CB2' with 63 kA		PSEG (100%)
b1541	Open the Hudson 230 kV bus tie		PSEG (100%)
b1588	Reconductor the Eagle Point - Gloucester 230 kV circuit #1 and #2 with higher conductor rating		JCPL (10.31%) / Neptune* (0.98%) / HTP (0.75%) / PECO (30.81%) / ECP** (0.82%) / PSEG (54.17%) / RE (2.16%)
b1589	Re-configure the Kearny 230 kV substation and loop the P-2216-1 (Essex - NJT Meadows) 230 kV circuit		ATSI (8.00%) / HTP (20.18%) / PENELEC (7.77%) / PSEG (61.59%) / RE (2.46%)
b1590	Upgrade the PSEG portion of the Camden Richmond 230 kV circuit to six wire conductor and replace terminal equipment at Camden		BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPCO (1.93%) / PPL (2.46%) / ECP** (0.16%)
b1749	Advance n1237 (Replace Essex 230 kV breaker '22H' with 80kA)		PSEG (100%)
b1750	Advance n0666.5 (Replace Hudson 230 kV breaker '1HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1751	Advance n0666.3 (Replace Hudson 230 kV breaker '2HA' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1752	Advance n0666.10 (Replace Hudson 230 kV breaker '2HB' with 80 kA (without TRV cap, so actually 63 kA))	PSEG (100%)
b1753	Marion 138 kV breaker '7PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1754	Marion 138 kV breaker '3PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1755	Marion 138 kV breaker '6PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1787	Build a second 230 kV circuit from Cox's Corner - Lumberton	AEC (4.96%) / JCPL (44.20%) / NEPTUNE* (0.53%) / HTP (0.15%) / ECP** (0.16%) / PSEG (48.08%) / RE (1.92%)
b2034	Install a reactor along the Kearny - Essex 138 kV line	PSEG (100%)
b2035	Replace Sewaren 138 kV breaker '11P'	PSEG (100%)
b2036	Replace Sewaren 138 kV breaker '21P'	PSEG (100%)
b2037	Replace PVSC 138 kV breaker '452'	PSEG (100%)
b2038	Replace PVSC 138 kV breaker '552'	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2039	Replace Bayonne 138 kV breaker '11P'		PSEG (100%)
b2139	Reconductor the Mickleton - Gloucester 230 kV parallel circuits with double bundle conductor		PSEG (61.11%) / PECO (36.45%) / RE (2.44%)
b2146	Re-configure the Brunswick 230 kV and 69 kV substations		PSEG (96.16%) / RE (3.84%)
b2151	Construct Jackson Rd. 69 kV substation and loop the Cedar Grove - Hinchmans Ave into Jackson Rd. and construct Hawthorne 69 kV substation and build 69 kV circuit from Hinchmans Ave - Hawthorne - Fair Lawn		PSEG (100%)
b2159	Reconfigure the Linden, Bayway, North Ave, and Passaic Valley S.C. 138 kV substations. Construct and loop new 138 kV circuit to new airport station		PSEG (72.61%) / HTP (24.49%) / RE (2.90%)

\*Neptune Regional Transmission System, LLC

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## SCHEDULE 12 – APPENDIX

### (14) Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0216	Install -100/+525 MVAR dynamic reactive device at Black Oak	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (48.02%) / BGE (8.00%) / Dominion (28.85%) / PEPCO (15.13%)</u>
b0218	Install third Wylie Ridge 500/345kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0220	Upgrade coolers on Wylie Ridge 500/345 kV #7	
b0229	Install fourth Bedington 500/138 kV	
b0230	Install fourth Meadowbrook 500/138 kV	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		APS (79.16%) / BGE (3.61%) / DPL (0.86%) / Dominion (11.75%) / ME (0.67%) / PEPCO (3.95%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0238	Reconductor Doubs – Dickerson and Doubs – Aqueduct 1200 MVA	As specified under the procedures detailed in Attachment H-18B, Section 1.b	BGE (16.66%) / Dominion (33.66%) / PEPCO (49.68%)
b0240	Open the Black Oak #3 500/138 kV transformer for the loss of Hatfield – Back Oak 500 kV line		APS (100%)
b0245	Replacement of the existing 954 ACSR conductor on the Bedington – Nipetown 138 kV line with high temperature/low sag conductor		APS (100%)
b0246	Rebuild of the Double Tollgate – Old Chapel 138 kV line with 954 ACSR conductor	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)
b0273	Open both North Shenandoah #3 transformer and Strasburg – Edinburgh 138 kV line for the loss of Mount Storm – Meadowbrook 572 500 kV		APS (100%)
b0322	Convert Lime Kiln substation to 230 kV operation		APS (100%)
b0323	Replace the North Shenandoah 138/115 kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.2	Build new Meadow Brook – Loudoun 500 kV circuit (20 of 50 miles)	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0343	Replace Doubs 500/230 kV transformer #2	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0344	Replace Doubs 500/230 kV transformer #3	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0345	Replace Doubs 500/230 kV transformer #4	As specified under the procedures detailed in Attachment H-18B, Section 1.b

**Load-Ratio Share Allocation:**  
AEC (1.70%) / AEP (14.25%) /  
APS (5.53%) / ATSI (8.09%) /  
BGE (4.19%) / ComEd (13.43%)  
/ Dayton (2.12%) / DEOK  
(3.37%) / DL (1.77%) / DPL  
(2.62%) / Dominion (12.39%) /  
EKPC (1.82%) / HTP\*\*\* (0.20%)  
/ JCPL (3.78%) / ME (1.87%) /  
NEPTUNE\* (0.42%) / PECO  
(5.30%) / PENELEC (1.84%) /  
PEPCO (4.18%) / PPL (4.46%) /  
PSEG (6.22%) / RE (0.25%) /  
ECP\*\* (0.20%)

**DFAX Allocation:**  
Dominion (88.62%) / PEPCO  
(11.38%)

AEC (1.85%) / BGE (21.49%) /  
DPL (3.91%) / Dominion  
(28.86%) / ME (2.97%) / PECO  
(5.73%) / PEPCO (35.19%)

AEC (1.86%) / BGE (21.50%) /  
DPL (3.91%) / Dominion  
(28.82%) / ME (2.97%) / PECO  
(5.74%) / PEPCO (35.20%)

AEC (1.85%) / BGE (21.49%) /  
DPL (3.90%) / Dominion  
(28.83%) / ME (2.98%) / PECO  
(5.75%) / PEPCO (35.20%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.1	Build new Mt. Storm – 502 Junction 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.2	Build new Mt. Storm – Meadow Brook 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.3	Build new 502 Junction 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.4	Upgrade Meadow Brook 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b

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\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.5	Replace Harrison 500 kV breaker HL-3	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%)  / Dayton (2.12%) / DEOK  (3.37%) / DL (1.77%) / DPL  (2.62%) / Dominion (12.39%) /  EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>
b0347.6	Upgrade (per ABB inspection) breaker HL-6	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%)  / Dayton (2.12%) / DEOK  (3.37%) / DL (1.77%) / DPL  (2.62%) / Dominion (12.39%) /  EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.7	Upgrade (per ABB inspection) breaker HL-7	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>
b0347.8	Upgrade (per ABB inspection) breaker HL-8	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (62.13%) / PEPCO (37.87%)</u>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.9	Upgrade (per ABB inspection) breaker HL-10	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>
b0347.10	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-1	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.11	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-3	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>
b0347.12	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-4	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.13	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-6	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>
b0347.14	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-7	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.15	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-9	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>
b0347.16	Upgrade (per ABB inspection) Harrison 500 kV breaker 'HL-3'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.17	Replace Meadow Brook 138 kV breaker 'MD-10'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u></p>
b0347.18	Replace Meadow Brook 138 kV breaker 'MD-11'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u></p>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.19	Replace Meadow Brook 138 kV breaker 'MD-12'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>
b0347.20	Replace Meadow Brook 138 kV breaker 'MD-13'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.21	Replace Meadow Brook 138 kV breaker 'MD-14'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>
b0347.22	Replace Meadow Brook 138 kV breaker 'MD-15'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>

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\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.23	Replace Meadow Brook 138 kV breaker 'MD-16'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u></p>
b0347.24	Replace Meadow Brook 138 kV breaker 'MD-17'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u></p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.25	Replace Meadow Brook 138 kV breaker 'MD-18'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>
b0347.26	Replace Meadow Brook 138 kV breaker 'MD-22#1 CAP'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.27	Replace Meadow Brook 138 kV breaker 'MD-4'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion</u> <u>(49.99%) / PEPCO (13.58%)</u>
b0347.28	Replace Meadow Brook 138 kV breaker 'MD-5'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion</u> <u>(49.99%) / PEPCO (13.58%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

**Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)**

b0347.29	Replace Meadowbrook 138 kV breaker 'MD-6'		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion</u>  <u>(49.99%) / PEPCO (13.58%)</u></p>
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\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.30	Replace Meadowbrook 138 kV breaker 'MD-7'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%)  / Dayton (2.12%) / DEOK  (3.37%) / DL (1.77%) / DPL  (2.62%) / Dominion (12.39%) /  EKPC (1.82%) / HTP***  (0.20%) / JCPL (3.78%) / ME  (1.87%) / NEPTUNE* (0.42%) /  PECO (5.30%) / PENELEC  (1.84%) / PEPCO (4.18%) / PPL  (4.46%) / PSEG (6.22%) / RE  (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion</u>  <u>(49.99%) / PEPCO (13.58%)</u></p>
b0347.31	Replace Meadowbrook 138 kV breaker 'MD-8'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%)  / Dayton (2.12%) / DEOK  (3.37%) / DL (1.77%) / DPL  (2.62%) / Dominion (12.39%) /  EKPC (1.82%) / HTP***  (0.20%) / JCPL (3.78%) / ME  (1.87%) / NEPTUNE* (0.42%) /  PECO (5.30%) / PENELEC  (1.84%) / PEPCO (4.18%) / PPL  (4.46%) / PSEG (6.22%) / RE  (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion</u>  <u>(49.99%) / PEPCO (13.58%)</u></p>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.32	Replace Meadowbrook 138 kV breaker 'MD-9'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u></p>
b0347.33	Replace Meadow Brook 138kV breaker 'MD-1'	APS (100%)
b0347.34	Replace Meadow Brook 138kV breaker 'MD-2'	APS (100%)
b0348	Upgrade Stonewall – Inwood 138 kV with 954 ACSR conductor	APS (100%)
b0373	Convert Doubs – Monocacy 138 kV facilities to 230 kV operation	AEC (1.82%) / APS (76.84%) / DPL (2.64%) / JCPL (4.53%) / ME (9.15%) / Neptune* (0.42%) / PPL (4.60%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

**Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)**

b0393	Replace terminal equipment at Harrison 500 kV and Belmont 500 kV		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%)  / Dayton (2.12%) / DEOK  (3.37%) / DL (1.77%) / DPL  (2.62%) / Dominion (12.39%) /  EKPC (1.82%) / HTP***  (0.20%) / JCPL (3.78%) / ME  (1.87%) / NEPTUNE* (0.42%) /  PECO (5.30%) / PENELEC  (1.84%) / PEPCO (4.18%) / PPL  (4.46%) / PSEG (6.22%) / RE  (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>ATSI (33.81%) / Dayton</u>  <u>(14.78%) / DEOK (44.45%) /</u>  <u>EKPC (6.96%)</u></p>
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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0406.1	Replace Mitchell 138 kV breaker “#4 bank”		APS (100%)
b0406.2	Replace Mitchell 138 kV breaker “#5 bank”		APS (100%)
b0406.3	Replace Mitchell 138 kV breaker “#2 transf”		APS (100%)
b0406.4	Replace Mitchell 138 kV breaker “#3 bank”		APS (100%)
b0406.5	Replace Mitchell 138 kV breaker “Charlerio #2”		APS (100%)
b0406.6	Replace Mitchell 138 kV breaker “Charlerio #1”		APS (100%)
b0406.7	Replace Mitchell 138 kV breaker “Shepler Hill Jct”		APS (100%)
b0406.8	Replace Mitchell 138 kV breaker “Union Jct”		APS (100%)
b0406.9	Replace Mitchell 138 kV breaker “#1-2 138 kV bus tie”		APS (100%)
b0407.1	Replace Marlowe 138 kV breaker “#1 transf”		APS (100%)
b0407.2	Replace Marlowe 138 kV breaker “MBO”		APS (100%)
b0407.3	Replace Marlowe 138 kV breaker “BMA”		APS (100%)
b0407.4	Replace Marlowe 138 kV breaker “BMR”		APS (100%)
b0407.5	Replace Marlowe 138 kV breaker “WC-1”		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0407.6	Replace Marlowe 138 kV breaker “R11”		APS (100%)
b0407.7	Replace Marlowe 138 kV breaker “W”		APS (100%)
b0407.8	Replace Marlowe 138 kV breaker “138 kV bus tie”		APS (100%)
b0408.1	Replace Trissler 138 kV breaker “Belmont 604”		APS (100%)
b0408.2	Replace Trissler 138 kV breaker “Edgelawn 90”		APS (100%)
b0409.1	Replace Weirton 138 kV breaker “Wylie Ridge 210”		APS (100%)
b0409.2	Replace Weirton 138 kV breaker “Wylie Ridge 216”		APS (100%)
b0410	Replace Glen Falls 138 kV breaker “McAlpin 30”		APS (100%)
b0417	Reconductor Mitchell – Shepler Hill Junction 138kV with 954 ACSR		APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0418	Install a breaker failure auto-restoration scheme at Cabot 500 kV for the failure of the #6 breaker	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0419	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <b><u>APS (100%)</u></b>
b0420	Operating Procedure to open the Black Oak 500/138 kV transformer #3 for the loss of Hatfield – Ronco 500 kV and the Hatfield #3 Generation	APS (100%)
b0445	Upgrade substation equipment and reconductor the Tidd – Mahans Lane – Weirton 138kV circuit with 954 ACSR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0460	Raise limiting structures on Albright – Bethelboro 138 kV to raise the rating to 175 MVA normal 214 MVA emergency		APS (100%)
b0491	Construct an Amos to Welton Spring to WV state line 765 kV circuit (APS equipment)	As specified under the procedures detailed in Attachment H-19B	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPSCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPSCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

**Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)**

b0492	Construct a Welton Spring to Kemptown 765 kV line (APS equipment)	As specified under the procedures detailed in Attachment H-19B	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>
b0492.3	Replace Eastalco 230 kV breaker D-26		APS (100%)
b0492.4	Replace Eastalco 230 kV breaker D-28		APS (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.5	Replace Eastalco 230 kV breaker D-31	APS (100%)
b0495	Replace existing Kammer 765/500 kV transformer with a new larger transformer	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (0.73%) / BGE (43.42%) / Dayton (0.67%) / DEOK (1.42%) / EKPC (0.22%) / PEPCO (53.54%)</u></p>
b0533	Reconductor the Powell Mountain – Sutton 138 kV line	APS (100%)
b0534	Install a 28.61 MVAR capacitor on Sutton 138 kV	APS (100%)
b0535	Install a 44 MVAR capacitor on Dutch Fork 138 kV	APS (100%)
b0536	Replace Doubs circuit breaker DJ1	APS (100%)
b0537	Replace Doubs circuit breaker DJ7	APS (100%)
b0538	Replace Doubs circuit breaker DJ10	APS (100%)
b0572.1	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0572.2	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)
b0573	Reconfigure circuits in Butler – Cabot 138 kV area	APS (100%)
b0577	Replace Fort Martin 500 kV breaker FL-1	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (100%)</u></p>
b0584	Install 33 MVAR 138 kV capacitor at Necessity 138 kV	APS (100%)
b0585	Increase Cecil 138 kV capacitor size to 44 MVAR, replace five 138 kV breakers at Cecil due to increased short circuit fault duty as a result of the addition of the Prexy substation	APS (100%)
b0586	Increase Whiteley 138 kV capacitor size to 44 MVAR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0587	Reconductor AP portion of Tidd – Carnegie 138 kV and Carnegie – Weirton 138 kV with 954 ACSR	APS (100%)
b0588	Install a 40.8 MVAR 138 kV capacitor at Grassy Falls	APS (100%)
b0589	Replace five 138 kV breakers at Cecil	APS (100%)
b0590	Replace #1 and #2 breakers at Charleroi 138 kV	APS (100%)
b0591	Install a 25.2 MVAR capacitor at Seneca Caverns 138 kV	APS (100%)
b0673	Rebuild Elko – Carbon Center Junction using 230 kV construction	APS (100%)
b0674	Construct new Osage – Whiteley 138 kV circuit	APS (97.68%) / DL (0.96%) / PENELEC (1.09%) / ECP** (0.01%) / PSEG (0.25%) / RE (0.01%)
b0674.1	Replace the Osage 138 kV breaker ‘CollinsF126’	APS (100%)
b0675.1	Convert Monocacy - Walkersville 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.2	Convert Walkersville - Catoclin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.3	Convert Ringgold - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.4	Convert Catoctin - Carroll 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.5	Convert portion of Ringgold Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.6	Convert Catoctin Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.7	Convert portion of Carroll Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.8	Convert Monocacy Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.9	Convert Walkersville Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0676.1	Reconductor Doubs - Lime Kiln (#207) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0676.2	Reconductor Doubs - Lime Kiln (#231) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0677	Reconductor Double Toll Gate – Riverton with 954 ACSR	APS (100%)
b0678	Reconductor Glen Falls - Oak Mound 138kV with 954 ACSR	APS (100%)
b0679	Reconductor Grand Point – Letterkenny with 954 ACSR	APS (100%)
b0680	Reconductor Greene – Letterkenny with 954 ACSR	APS (100%)
b0681	Replace 600/5 CT's at Franklin 138 kV	APS (100%)
b0682	Replace 600/5 CT's at Whiteley 138 kV	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0684	Reconductor Guilford – South Chambersburg with 954 ACSR	APS (100%)
b0685	Replace Ringgold 230/138 kV #3 with larger transformer	APS (71.93%) / JCPL (4.17%) / ME (6.79%) / NEPTUNE* (0.38%) / PECO (4.05%) / PENELEC (5.88%) / ECP** (0.18%) / PSEG (6.37%) / RE (0.25%)
b0704	Install a third Cabot 500/138 kV transformer	APS (74.36%) / DL (2.73%) PENELEC (22.91%)
b0797	Advance n0321 (Replace Doubs Circuit Breaker DJ2)	APS(100%)
b0798	Advance n0322 (Replace Doubs Circuit Breaker DJ3)	APS(100%)
b0799	Advance n0323 (Replace Doubs Circuit Breaker DJ6)	APS(100%)
b0800	Advance n0327 (Replace Doubs Circuit Breaker DJ16)	APS(100%)
b0941	Replace Opequon 138 kV breaker 'BUSTIE'	APS(100%)
b0942	Replace Butler 138 kV breaker '#1 BANK'	APS(100%)
b0943	Replace Butler 138 kV breaker '#2 BANK'	APS(100%)
b0944	Replace Yukon 138 kV breaker 'Y-8'	APS(100%)
b0945	Replace Yukon 138 kV breaker 'Y-3'	APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0946	Replace Yukon 138 kV breaker 'Y-1'		APS(100%)
b0947	Replace Yukon 138 kV breaker 'Y-5'		APS(100%)
b0948	Replace Yukon 138 kV breaker 'Y-2'		APS(100%)
b0949	Replace Yukon 138 kV breaker 'Y-19'		APS(100%)
b0950	Replace Yukon 138 kV breaker 'Y-4'		APS(100%)
b0951	Replace Yukon 138 kV breaker 'Y-9'		APS(100%)
b0952	Replace Yukon 138 kV breaker 'Y-11'		APS(100%)
b0953	Replace Yukon 138 kV breaker 'Y-13'		APS(100%)
b0954	Replace Charleroi 138 kV breaker '#1 XFMR BANK'		APS(100%)
b0955	Replace Yukon 138 kV breaker 'Y-7'		APS(100%)
b0956	Replace Pruntytown 138 kV breaker 'P-9'		APS(100%)
b0957	Replace Pruntytown 138 kV breaker 'P-12'		APS(100%)
b0958	Replace Pruntytown 138 kV breaker 'P-15'		APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0959 Replace Charleroi 138 kV breaker '#2 XFMR BANK'		APS(100%)
b0960 Replace Pruntytown 138 kV breaker 'P-2'		APS(100%)
b0961 Replace Pruntytown 138 kV breaker 'P-5'		APS(100%)
b0962 Replace Yukon 138 kV breaker 'Y-18'		APS(100%)
b0963 Replace Yukon 138 kV breaker 'Y-10'		APS(100%)
b0964 Replace Pruntytown 138 kV breaker 'P-11'		APS(100%)
b0965 Replace Springdale 138 kV breaker '138E'		APS(100%)
b0966 Replace Pruntytown 138 kV breaker 'P-8'		APS(100%)
b0967 Replace Pruntytown 138 kV breaker 'P-14'		APS(100%)
b0968 Replace Ringgold 138 kV breaker '#3 XFMR BANK'		APS(100%)
b0969 Replace Springdale 138 kV breaker '138C'		APS(100%)
b0970 Replace Rivesville 138 kV breaker '#8 XFMR BANK'		APS(100%)
b0971 Replace Springdale 138 kV breaker '138F'		APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0972	Replace Belmont 138 kV breaker 'B-16'		APS(100%)
b0973	Replace Springdale 138 kV breaker '138G'		APS(100%)
b0974	Replace Springdale 138 kV breaker '138V'		APS(100%)
b0975	Replace Armstrong 138 kV breaker 'BROOKVILLE'		APS(100%)
b0976	Replace Springdale 138 kV breaker '138P'		APS(100%)
b0977	Replace Belmont 138 kV breaker 'B-17'		APS(100%)
b0978	Replace Springdale 138 kV breaker '138U'		APS(100%)
b0979	Replace Springdale 138 kV breaker '138D'		APS(100%)
b0980	Replace Springdale 138 kV breaker '138R'		APS(100%)
b0981	Replace Yukon 138 kV breaker 'Y-12'		APS(100%)
b0982	Replace Yukon 138 kV breaker 'Y-17'		APS(100%)
b0983	Replace Yukon 138 kV breaker 'Y-14'		APS(100%)
b0984	Replace Rivesville 138 kV breaker '#10 XFMR BANK'		APS(100%)
b0985	Replace Belmont 138 kV breaker 'B-14'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0986	Replace Armstrong 138 kV breaker 'RESERVE BUS'		APS(100%)
b0987	Replace Yukon 138 kV breaker 'Y-16'		APS(100%)
b0988	Replace Springdale 138 kV breaker '138T'		APS(100%)
b0989	Replace Edgelawn 138 kV breaker 'GOFF RUN #632'		APS(100%)
b0990	Change reclosing on Cabot 138 kV breaker 'C-9'		APS(100%)
b0991	Change reclosing on Belmont 138 kV breaker 'B-7'		APS(100%)
b0992	Change reclosing on Belmont 138 kV breaker 'B-12'		APS(100%)
b0993	Change reclosing on Belmont 138 kV breaker 'B-9'		APS(100%)
b0994	Change reclosing on Belmont 138 kV breaker 'B-19'		APS(100%)
b0995	Change reclosing on Belmont 138 kV breaker 'B-21'		APS(100%)
b0996	Change reclosing on Willow Island 138 kV breaker 'FAIRVIEW #84'		APS(100%)
b0997	Change reclosing on Cabot 138 kV breaker 'C-4'		APS(100%)
b0998	Change reclosing on Cabot 138 kV breaker 'C-1'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0999	Replace Redbud 138 kV breaker 'BUS TIE'		APS(100%)
b1022.1	Reconfigure the Peters to Bethel Park 138 kV line and Elrama to Woodville 138 kV line to create a 138 kV path from Woodville to Peters and a 138 kV path from Elrama to Bethel Park		APS (96.98%) / DL (3.02%)
b1022.3	Add static capacitors at Smith 138 kV		APS (96.98%) / DL (3.02%)
b1022.4	Add static capacitors at North Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.5	Add static capacitors at South Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.6	Add static capacitors at Manifold 138 kV		APS (96.98%) / DL (3.02%)
b1022.7	Add static capacitors at Houston 138 kV		APS (96.98%) / DL (3.02%)
b1023.1	Install a 500/138 kV transformer at 502 Junction		APS (100%)
b1023.2	Construct a new Franklin - 502 Junction 138 kV line including a rebuild of the Whiteley - Franklin 138 kV line to double circuit		APS (100%)
b1023.3	Construct a new 502 Junction - Osage 138 kV line		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1023.4	Construct Braddock 138 kV breaker station that connects the Charleroi - Gordon 138 kV line, Washington - Franklin 138 kV line and the Washington - Vanceville 138 kV line including a 66 MVAR capacitor	APS (100%)
b1027	Increase the size of the shunt capacitors at Enon 138 kV	APS (100%)
b1028	Raise three structures on the Osage - Collins Ferry 138 kV line to increase the line rating	APS (100%)
b1128	Reconductor the Edgewater – Vasco Tap; Edgewater – Loyalhanna 138 kV lines with 954 ACSR	APS (100%)
b1129	Reconductor the East Waynesboro – Ringgold 138 kV line with 954 ACSR	APS (100%)
b1131	Upgrade Double Tollgate – Meadowbrook MDT Terminal Equipment	APS (100%)
b1132	Upgrade Double Tollgate-Meadowbrook MBG terminal equipment	APS (100%)
b1133	Upgrade terminal equipment at Springdale	APS (100%)
b1135	Reconductor the Bartonville – Meadowbrook 138 kV line with high temperature conductor	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1137 Reconductor the Eastgate – Luxor 138 kV; Eastgate – Sony 138 kV line with 954 ACSR		APS (78.59%) / PENELEC (14.08%) / ECP ** (0.23%) / PSEG (6.83%) / RE (0.27%)
b1138 Reconductor the King Farm – Sony 138 kV line with 954 ACSR		APS (100%)
b1139 Reconductor the Yukon – Waltz Mills 138 kV line with high temperature conductor		APS (100%)
b1140 Reconductor the Bracken Junction – Luxor 138 kV line with 954 ACSR		APS (100%)
b1141 Reconductor the Sewickley – Waltz Mills Tap 138 kV line with high temperature conductor		APS (100%)
b1142 Reconductor the Bartonsville – Stephenson 138 kV; Stonewall – Stephenson 138 kV line with 954 ACSR		APS (100%)
b1143 Reconductor the Youngwood – Yukon 138 kV line with high temperature conductor		APS (89.92%) / PENELEC (10.08%)
b1144 Reconductor the Bull Creek Junction – Cabot 138 kV line with high temperature conductor		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1145	Reconductor the Lawson Junction – Cabot 138 kV line with high temperature conductor		APS (100%)
b1146	Replace Layton - Smithton #61 138 kV line structures to increase line rating		APS (100%)
b1147	Replace Smith – Yukon 138 kV line structures to increase line rating		APS (100%)
b1148	Reconductor the Loyalhanna – Luxor 138 kV line with 954 ACSR		APS (100%)
b1149	Reconductor the Luxor – Stony Springs Junction 138 kV line with 954 ACSR		APS (100%)
b1150	Upgrade terminal equipment at Social Hall		APS (100%)
b1151	Reconductor the Greenwood – Redbud 138 kV line with 954 ACSR		APS (100%)
b1152	Reconductor Grand Point – South Chambersburg		APS (100%)
b1159	Replace Peters 138 kV breaker ‘Bethel P OCB’		APS (100%)
b1160	Replace Peters 138 kV breaker ‘Cecil OCB’		APS (100%)
b1161	Replace Peters 138 kV breaker ‘Union JctOCB’		APS (100%)
b1162	Replace Double Toll Gate 138 kV breaker ‘DRB-2’		APS (100%)
b1163	Replace Double Toll Gate 138 kV breaker ‘DT 138 kV OCB’		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1164	Replace Cecil 138 kV breaker 'Enlow OCB'		APS (100%)
b1165	Replace Cecil 138 kV breaker 'South Fayette'		APS (100%)
b1166	Replace Wylie Ridge 138 kV breaker 'W-9'		APS (100%)
b1167	Replace Reid 138 kV breaker 'RI-2'		APS (100%)
b1171.1	Install the second Black Oak 500/138 kV transformer, two 138 kV breaker, and related substation work		BGE (20.76%) / DPL (3.14%) / Dominion (39.55%) / ME (2.71%) / PECO (3.36%) / PEPCO (30.48%)
b1171.3	Install six 500 kV breakers and remove BOL1 500 kV breaker at Black Oak		AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b1200	Reconductor Double Toll Gate – Greenwood 138 kV with 954 ACSR conductor		APS (100%)
b1221.1	Convert Carbon Center from 138 kV to a 230 kV ring bus		APS (100%)
b1221.2	Construct Bear Run 230 kV substation with 230/138 kV transformer		APS (100%)

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\*\*\*Hudson Transmission Partners, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1221.3	Loop Carbon Center Junction – Williamette line into Bear Run	APS (100%)
b1221.4	Carbon Center – Carbon Center Junction & Carbon Center Junction – Bear Run conversion from 138 kV to 230 kV	APS (100%)
b1230	Reconductor Willow-Eureka & Eureka-St Mary 138 kV lines	APS (100%)
b1232	Reconductor Nipetown – Reid 138 kV with 1033 ACCR	AEC (1.40%) / APS (75.74%) / DPL (1.92%) / JCPL (2.92%) / ME (6.10%) / Neptune (0.27%) / PECO (4.40%) / PENELEC (3.26%) / PPL (3.99%)
b1233.1	Upgrade terminal equipment at Washington	APS (100%)
b1234	Replace structures between Ridgeway and Paper city	APS (100%)
b1235	Reconductor the Albright – Black Oak AFA 138 kV line with 795 ACSS/TW	APS (30.25%) / BGE (16.10%) / Dominion (30.51%) / PEPCO (23.14%)
b1237	Upgrade terminal equipment at Albright, replace bus and line side breaker disconnects and leads, replace breaker risers, upgrade RTU and line	APS (100%)
b1238	Install a 138 kV 44 MVAR capacitor at Edgelawn substation	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1239	Install a 138 kV 44 MVAR capacitor at Ridgeway substation	APS (100%)
b1240	Install a 138 kV 44 MVAR capacitor at Elko Substation	APS (100%)
b1241	Upgrade terminal equipment at Washington substation on the GE Plastics/DuPont terminal	APS (100%)
b1242	Replace structures between Collins Ferry and West Run	APS (100%)
b1243	Install a 138 kV capacitor at Potter Substation	APS (100%)
b1261	Replace Butler 138 kV breaker '1-2 BUS 138'	APS (100%)
b1383	Install 2nd 500/138 kV transformer at 502 Junction	APS (93.27%) / DL (5.39%) / PENELEC (1.34%)
b1384	Reconductor approximately 2.17 miles of Bedington – Shepherdstown 138 kV with 954 ACSR	APS (100%)
b1385	Reconductor Halfway – Paramount 138 kV with 1033 ACCR	APS (100%)
b1386	Reconductor Double Tollgate – Meadow Brook 138 kV ckt 2 with 1033 ACCR	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1387	Reconductor Double Tollgate – Meadow Brook 138 kV	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1388	Reconductor Feagans Mill – Millville 138 kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1389	Reconductor Bens Run – St. Mary’s 138 kV with 954 ACSR		AEP (12.40%) / APS (17.80%) / DL (69.80%)
b1390	Replace Bus Tie Breaker at Opequon		APS (100%)
b1391	Replace Line Trap at Gore		APS (100%)
b1392	Replace structure on Belmont – Trissler 138 kV line		APS (100%)
b1393	Replace structures Kingwood – Pruntytown 138 kV line		APS (100%)
b1395	Upgrade Terminal Equipment at Kittanning		APS (100%)
b1401	Change reclosing on Pruntytown 138 kV breaker ‘P-16’ to 1 shot at 15 seconds		APS (100%)
b1402	Change reclosing on Rivesville 138 kV breaker ‘Pruntytown #34’ to 1 shot at 15 seconds		APS (100%)
b1403	Change reclosing on Yukon 138 kV breaker ‘Y21 Shepler’ to 1 shot at 15 seconds		APS (100%)
b1404	Replace the Kiski Valley 138 kV breaker ‘Vandergrift’ with a 40 kA breaker		APS (100%)
b1405	Change reclosing on Armstrong 138 kV breaker ‘GARETTRJCT’ at 1 shot at 15 seconds		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1406	Change reclosing on Armstrong 138 kV breaker 'KITTANNING' to 1 shot at 15 seconds		APS (100%)
b1407	Change reclosing on Armstrong 138 kV breaker 'BURMA' to 1 shot at 15 seconds		APS (100%)
b1408	Replace the Weirton 138 kV breaker 'Tidd 224' with a 40 kA breaker		APS (100%)
b1409	Replace the Cabot 138 kV breaker 'C9 Kiski Valley' with a 40 kA breaker		APS (100%)
b1507.2	Terminal Equipment upgrade at Doubs substation		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)</u>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1507.3	Mt. Storm – Doubs transmission line rebuild in Maryland – Total line mileage for APS is 2.71 miles	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)</u></p>
b1510	Install 59.4 MVAR capacitor at Waverly	APS (100%)
b1672	Install a 230 kV breaker at Carbon Center	APS (100%)
b0539	Replace Doubs circuit breaker DJ11	APS (100%)
b0540	Replace Doubs circuit breaker DJ12	APS (100%)
b0541	Replace Doubs circuit breaker DJ13	APS (100%)
b0542	Replace Doubs circuit breaker DJ20	APS (100%)
b0543	Replace Doubs circuit breaker DJ21	APS (100%)
b0544	Remove instantaneous reclose from Eastalco circuit breaker D-26	APS (100%)
b0545	Remove instantaneous reclose from Eastalco circuit breaker D-28	APS (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0559	Install 200 MVAR capacitor at Meadow Brook 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>
b0560	Install 250 MVAR capacitor at Kemptown 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1803	Build a 300 MVAR Switched Shunt at Doubs 500 kV and increase (~50 MVAR) in size the existing Switched Shunt at Doubs 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)</u></p>
b1804	Install a new 600 MVAR SVC at Meadowbrook 500kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u></p>
b1816.1	Replace relaying at the Mt. Airy substation on the Carroll - Mt. Airy 230 kV line	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1816.2	Adjust the control settings of all existing capacitors at Mt Airy 34.5kV, Monocacy 138kV, Ringgold 138kV served by Potomac Edison's Eastern 230 kV network to ensure that all units will be on during the identified N-1-1 contingencies		APS (100%)
b1816.3	Replace existing unidirectional LTC controller on the No. 4, 230/138 kV transformer at Carroll substation with a bidirectional unit		APS (100%)
b1816.4	Isolate and bypass the 138 kV reactor at Germantown Substation		APS (100%)
b1816.6	Replace 336.4 ACSR conductor on the Catoclin - Carroll 138 kV line using 556.5 ACSR (26/7) or equivalent on existing structures (12.7 miles), 800 A wave traps at Carroll and Catoclin with 1200 A units, and 556.5 ACSR SCCIR (Sub-conductor) line risers and bus traps with 795 ACSR or equivalent		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1822	Replace the 1200 A wave trap, line risers, breaker risers with 1600 A capacity terminal equipment at Reid 138 kV SS		APS (100%)
b1823	Replace the 800 A wave trap with a 1200 A wave trap at Millville 138 kV substation		APS (100%)
b1824	Reconductor Grant Point - Guilford 138kV line approximately 8 miles of 556 ACSR with 795 ACSR		APS (100%)
b1825	Replace the 800 Amp line trap at Butler 138 kV Sub on the Cabot East 138 kV line		APS (100%)
b1826	Change the CT ratio at Double Toll Gate 138 kV SS on MDT line		APS (100%)
b1827	Change the CT ratio at Double Toll Gate 138 kV SS on MBG line		APS (100%)
b1828.1	Reconductor the Bartonville – Stephenson 3.03 mile 138 kV line of 556 ACSR with 795 ACSR		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1828.2	Reconductor the Stonewall – Stephenson 2.08 mile 138 kV line of 556 ACSR with 795 ACSR		APS (100%)
b1829	Replace the existing 138 kV 556.5 ACSR substation conductor risers with 954 ACSR at the Redbud 138 kV substation, including but not limited to the line side disconnect leads		APS (100%)
b1830	Replace 1200 A wave trap and 1024 ACAR breaker risers at Halfway 138 kV substation, and replace 1024 ACAR breaker risers at Paramount 138 kV substation		APS (100%)
b1832	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 1 (207) 230 kV line terminal		APS (100%)
b1833	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 2 (231) 230 kV line terminal		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1835	Reconductor 14.3 miles of 556 ACSR with 795 ACSR from Old Chapel to Millville 138 kV and upgrade line risers at Old Chapel 138 kV and Millville 138 kV and replace 1200 A wave trap at Millville 138 kV	APS (37.68%) / Dominion (34.46%) / PEPCO (13.69%) / BGE (11.45%) / ME (2.01%) / PENELEC (0.53%) / DL (0.18%)
b1836	Replace 1200 A wave trap with 1600 A wave trap at Reid 138 kV SS	APS (100%)
b1837	Replace 750 CU breaker risers with 795 ACSR at Marlowe 138 kV and replace 1200 A wave traps with 1600 A wave traps at Marlowe 138 kV and Bedington 138 kV	APS (100%)
b1838	Replace the 1200 A Bedington 138 kV line air switch and the 1200 A 138 kV bus tie air switch at Nipetown 138 kV with 1600 A switches	APS (100%)
b1839	Install additional 33 MVAR capacitors at Grand Point 138 kV SS and Guildford 138 kV SS	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1840	Construct a 138 kV line between Buckhannon and Weston 138 kV substations	APS (100%)
b1902	Replace line trap at Stonewall on the Stephenson 138 kV line terminal	APS (100%)
b1941	Loop the Homer City-Handsome Lake 345 kV line into the Armstrong substation and install a 345/138 kV transformer at Armstrong	APS (67.86%) / PENELEC (32.14%)
b1942	Change the CT ratio at Millville to improve the Millville – Old Chapel 138 kV line ratings	APS (100%)
b1964	Convert Moshannon substation to a 4 breaker 230 kV ring bus	APS (41.06%) / DPL (6.68%) / JCPL (5.48%) / ME (10.70%) / Neptune* (0.53%) / PECO (15.53%) / PPL (20.02%)
b1965	Install a 44 MVAR 138 kV capacitor at Luxor substation	APS (100%)
b1986	Upgrade the AP portion of the Elrama – Mitchell 138 kV line by replace breaker risers on the Mitchell 138 kV bus on the Elrama terminal	APS (100%)
b1987	Reconductor the Osage-Collins Ferry 138 kV line with 795 ACSS. Upgrade terminal equipment at Osage and Collins Ferry	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1988	Raise structures between Lake Lynn and West Run to eliminate the clearance de-rates on the West Run – Lake Lynn 138 kV line	APS (100%)
b1989	Raise structures between Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line	APS (100%)
b2095	Replace Weirt 138 kV breaker 'S-TORONTO226' with 63kA rated breaker	APS (100%)
b2096	Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'	APS (100%)
b2097	Replace Ridgeley 138 kV breaker '#2 XFMR OCB'	APS (100%)
b2098	Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker	APS (100%)
b2099	Revise the reclosing of Ridgeley 138 kV breaker 'RC1'	APS (100%)
b2100	Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker	APS (100%)
b2101	Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker	APS (100%)
b2102	Replace Armstrong 138 kV breaker 'GARETTRJCT' with 40kA rated breaker	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2103	Replace Armstrong 138 kV breaker 'BURMA' with 40kA rated breaker		APS (100%)
b2104	Replace Armstrong 138 kV breaker 'KITANNING' with 40kA rated breaker		APS (100%)
b2105	Replace Armstrong 138 kV breaker 'KISSINGERJCT' with 40kA rated breaker		APS (100%)
b2106	Replace Wylie Ridge 345 kV breaker 'WK-1' with 63kA rated breaker		APS (100%)
b2107	Replace Wylie Ridge 345 kV breaker 'WK-2' with 63kA rated breaker		APS (100%)
b2108	Replace Wylie Ridge 345 kV breaker 'WK-3' with 63kA rated breaker		APS (100%)
b2109	Replace Wylie Ridge 345 kV breaker 'WK-4' with 63kA rated breaker		APS (100%)
b2110	Replace Wylie Ridge 345 kV breaker 'WK-6' with 63kA rated breaker		APS (100%)
b2111	Replace Wylie Ridge 138 kV breaker 'WK-7' with 63kA rated breaker		APS (100%)
b2112	Replace Wylie Ridge 345 kV breaker 'WK-5'		APS (100%)
b2113	Replace Weirton 138 kV breaker 'NO 6 XFMR' with 63kA rated breaker		APS (100%)
b2114	Replace Armstrong 138 kV breaker 'Bus-Tie' (Status On-Hold pending retirement)		APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2124.1	Add a new 138 kV line exit		APS (100%)
b2124.2	Construct a 138 kV ring bus and install a 138/69 kV autotransformer		APS (100%)
b2124.3	Add new 138 kV line exit and install a 138/25 kV transformer		APS (100%)
b2124.4	Construct approximately 5.5 miles of 138 kV line		APS (100%)
b2124.5	Convert approximately 7.5 miles of 69 kV to 138 kV		APS (100%)
b2156	Install a 75 MVAR 230 kV capacitor at Shingletown Substation		APS (100%)
b2165	Replace 800A wave trap at Stonewall with a 1200 A wave trap		APS (100%)
b2166	Reconductor the Millville – Sleepy Hollow 138kV 4.25 miles of 556 ACSR with 795 ACSR, upgrade line risers at Sleepy Hollow, and change 1200 A CT tap at Millville to 800		APS (100%)
b2168	For Grassy Falls 138kV Capacitor bank adjust turn-on voltage to 1.0pu with a high limit of 1.04pu, For Crupperneck and Powell Mountain 138kV Capacitor Banks adjust turn-on voltage to 1.01pu with a high limit of 1.035pu		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2169	Replace/Raise structures on the Yukon-Smithton 138 kV line section to eliminate clearance de-rate	APS (100%)
b2170	Replace/Raise structures on the Smithton-Shepler Hill Jct 138 kV line section to eliminate clearance de-rate	APS (100%)
b2171	Replace/Raise structures on the Parsons-William 138 kV line section to eliminate clearance de-rate	APS (100%)
b2172	Replace/Raise structures on the Parsons - Loughs Lane 138 kV line section to eliminate clearance de-rate	APS (100%)

## SCHEDULE 12 – APPENDIX

- (17) **AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)	
b0318	Install a 765/138 kV transformer at Amos	AEP (99.00%) / PEPCO (1.00%)	
b0324	Replace entrance conductors, wave traps, and risers at the Tidd 345 kV station on the Tidd – Canton Central 345 kV circuit	AEP (100%)	
b0447	Replace Cook 345 kV breaker M2	AEP (100%)	
b0448	Replace Cook 345 kV breaker N2	AEP (100%)	
b0490	Construct an Amos – Bedington 765 kV circuit (AEP equipment)	As specified under the procedures detailed in Attachment H-19B	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.2	Replace Amos 138 kV breaker 'B'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.3	Replace Amos 138 kV breaker 'B1'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.4	Replace Amos 138 kV breaker 'C'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0490.5	Replace Amos 138 kV breaker 'C1'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.6	Replace Amos 138 kV breaker 'D'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0490.7	Replace Amos 138 kV breaker 'D2'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.8	Replace Amos 138 kV breaker 'E'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0490.9	Replace Amos 138 kV breaker 'E2'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0504	Add two advanced technology circuit breakers at Hanging Rock 765 kV to improve operational performance		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEP (100%)</p>
b0570	Reconductor East Side Lima – Sterling 138 kV		AEP (41.99%) / ComEd (58.01%)
b0571	Reconductor West Millersport – Millersport 138 kV		AEP (73.83%) / ComEd (19.26%) / Dayton (6.91%)
b0748	Establish a new 69 kV circuit between the Canal Road and East Wooster stations, establish a new 69 kV circuit between the West Millersburg and Moreland Switch stations (via Shreve), add reactive support via cap banks		AEP (100%)
b0838	Hazard Area 138 kV and 69 kV Improvement Projects		AEP (100%)
b0839	Replace existing 450 MVA transformer at Twin Branch 345 / 138 kV with a 675 MVA transformer		AEP (99.73%) / Dayton (0.27%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0840	String a second 138 kV circuit on the open tower position between Twin Branch and East Elkhart	AEP (100%)
b0840.1	Establish a new 138/69-34.5kV Station to interconnect the existing 34.5kV network	AEP (100%)
b0917	Replace Baileysville 138 kV breaker 'P'	AEP (100%)
b0918	Replace Riverview 138 kV breaker '634'	AEP (100%)
b0919	Replace Torrey 138 kV breaker 'W'	AEP (100%)
b1032.1	Construct a new 345/138kV station on the Marquis-Bixby 345kV line near the intersection with Ross - Highland 69kV	AEP (89.97%) / Dayton (10.03%)
b1032.2	Construct two 138kV outlets to Delano 138kV station and to Camp Sherman station	AEP (89.97%) / Dayton (10.03%)
b1032.3	Convert Ross - Circleville 69kV to 138kV	AEP (89.97%) / Dayton (10.03%)
b1032.4	Install 138/69kV transformer at new station and connect in the Ross - Highland 69kV line	AEP (89.97%) / Dayton (10.03%)
b1033	Add a third delivery point from AEP's East Danville Station to the City of Danville.	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.1	Establish new South Canton - West Canton 138kV line (replacing Torrey - West Canton) and Wagenhals - Wayview 138kV	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.2	Loop the existing South Canton - Wayview 138kV circuit in-and-out of West Canton	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.3	Install a 345/138kV 450 MVA transformer at Canton Central	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.4	Rebuild/reconductor the Sunnyside - Torrey 138kV line	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.5	Disconnect/eliminate the West Canton 138kV terminal at Torrey Station	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.6	Replace all 138kV circuit breakers at South Canton Station and operate the station in a breaker and a half configuration	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.7	Replace all obsolete 138kV circuit breakers at the Torrey and Wagenhals stations	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.8	Install additional 138kV circuit breakers at the West Canton, South Canton, Canton Central, and Wagenhals stations to accommodate the new circuits	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1035	Establish a third 345kV breaker string in the West Millersport Station. Construct a new West Millersport – Gahanna 138kV circuit. Miscellaneous improvements to 138kV transmission system.	AEP (100%)
b1036	Upgrade terminal equipment at Poston Station and update remote end relays	AEP (100%)
b1037	Sag check Bonsack–Cloverdale 138 kV, Cloverdale–Centerville 138kV, Centerville–Ivy Hill 138kV, Ivy Hill–Reusens 138kV, Bonsack–Reusens 138kV and Reusens–Monel–Gomingo–Joshua Falls 138 kV.	AEP (100%)
b1038	Check the Crooksville - Muskingum 138 kV sag and perform the required work to improve the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1039	Perform a sag study for the Madison – Cross Street 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1040	Rebuild an 0.065 mile section of the New Carlisle – Olive 138 kV line and change the 138 kV line switches at New Carlisle	AEP (100%)
b1041	Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating	AEP (100%)
b1042	Perform sag studies to raise the emergency rating of Amos – Poca 138kV	AEP (100%)
b1043	Perform sag studies to raise the emergency rating of Turner - Ruth 138kV	AEP (100%)
b1044	Perform sag studies to raise the emergency rating of Kenova – South Point 138kV	AEP (100%)
b1045	Perform sag studies of Tri State - Darrah 138 kV	AEP (100%)
b1046	Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating	AEP (100%)
b1047	Perform sag study of Otter Switch - Altavista 138kV to raise the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1048	Reconductor the Bixby - Three C - Groves and Bixby - Groves 138 kV tower line	AEP (100%)
b1049	Upgrade the risers at the Riverside station to increase the rating of Benton Harbor – Riverside 138kV	AEP (100%)
b1050	Rebuilding and reconductor the Bixby – Pickerington Road - West Lancaster 138 kV line	AEP (100%)
b1051	Perform a sag study for the Kenzie Creek – Pokagon 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1052	Unsix-wire the existing Hyatt - Sawmill 138 kV line to form two Hyatt - Sawmill 138 kV circuits	AEP (100%)
b1053	Perform a sag study and remediation of 32 miles between Claytor and Matt Funk.	AEP (100%)
b1091	Add 28.8 MVAR 138 kV capacitor bank at Huffman and 43.2 MVAR 138 kV Bank at Jubal Early and 52.8 MVAR 138 kV Bank at Progress Park Stations	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1092	Add 28.8 MVAR 138 kV capacitor bank at Sullivan Gardens and 52.8 MVAR 138 kV Bank at Reedy Creek Stations	AEP (100%)
b1093	Add a 43.2 MVAR capacitor bank at the Morgan Fork 138 kV Station	AEP (100%)
b1094	Add a 64.8 MVAR capacitor bank at the West Huntington 138 kV Station	AEP (100%)
b1108	Replace Ohio Central 138 kV breaker 'C2'	AEP (100%)
b1109	Replace Ohio Central 138 kV breaker 'D1'	AEP (100%)
b1110	Replace Sporn A 138 kV breaker 'J'	AEP (100%)
b1111	Replace Sporn A 138 kV breaker 'J2'	AEP (100%)
b1112	Replace Sporn A 138 kV breaker 'L'	AEP (100%)
b1113	Replace Sporn A 138 kV breaker 'L1'	AEP (100%)
b1114	Replace Sporn A 138 kV breaker 'L2'	AEP (100%)
b1115	Replace Sporn A 138 kV breaker 'N'	AEP (100%)
b1116	Replace Sporn A 138 kV breaker 'N2'	AEP (100%)
b1227	Perform a sag study on Altavista – Leesville 138 kV circuit	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1231	Replace the existing 138/69-12 kV transformer at West Moulton Station with a 138/69 kV transformer and a 69/12 kV transformer	AEP (96.69%) / Dayton (3.31%)
b1375	Replace Roanoke 138 kV breaker 'T'	AEP (100%)
b1376	Replace Roanoke 138 kV breaker 'E'	AEP (100%)
b1377	Replace Roanoke 138 kV breaker 'F'	AEP (100%)
b1378	Replace Roanoke 138 kV breaker 'G'	AEP (100%)
b1379	Replace Roanoke 138 kV breaker 'B'	AEP (100%)
b1380	Replace Roanoke 138 kV breaker 'A'	AEP (100%)
b1381	Replace Olive 345 kV breaker 'E'	AEP (100%)
b1382	Replace Olive 345 kV breaker 'R2'	AEP (100%)
b1416	Perform a sag study on the Desoto – Deer Creek 138 kV line to increase the emergency rating	AEP (100%)
b1417	Perform a sag study on the Delaware – Madison 138 kV line to increase the emergency rating	AEP (100%)
b1418	Perform a sag study on the Rockhill – East Lima 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1419	Perform a sag study on the Findlay Center – Fostoria Ctl 138 kV line to increase the emergency rating	AEP (100%)
b1420	A sag study will be required to increase the emergency rating for this line. Depending on the outcome of this study, more action may be required in order to increase the rating	AEP (100%)
b1421	Perform a sag study on the Sorenson – McKinley 138 kV line to increase the emergency rating	AEP (100%)
b1422	Perform a sag study on John Amos – St. Albans 138 kV line to allow for operation up to its conductor emergency rating	AEP (100%)
b1423	A sag study will be performed on the Chemical – Capitol Hill 138 kV line to determine if the emergency rating can be utilized	AEP (100%)
b1424	Perform a sag study for Benton Harbor – West Street – Hartford 138 kV line to improve the emergency rating	AEP (100%)
b1425	Perform a sag study for the East Monument – East Danville 138 kV line to allow for operation up to the conductor's maximum operating temperature	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1426	Perform a sag study for the Reusens – Graves 138 kV line to allow for operation up to the conductor’s maximum operating temperature	AEP (100%)
b1427	Perform a sag study on Smith Mountain – Leesville – Altavista – Otter 138 kV and on Boones – Forest – New London – JohnsMT – Otter	AEP (100%)
b1428	Perform a sag study on Smith Mountain – Candler’s Mountain 138 kV and Joshua Falls – Cloverdale 765 kV to allow for operation up to	AEP (100%)
b1429	Perform a sag study on Fremont – Clinch River 138 kV to allow for operation up to its conductor emergency ratings	AEP (100%)
b1430	Install a new 138 kV circuit breaker at Benton Harbor station and move the load from Watervliet 34.5 kV station to West street 138 kV	AEP (100%)
b1432	Perform a sag study on the Kenova – Tri State 138 kV line to allow for operation up to their conductor emergency rating	AEP (100%)
b1433	Replace risers in the West Huntington Station to increase the line ratings which would eliminate the overloads for the contingencies listed	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1434 Perform a sag study on the line from Desoto to Madison. Replace bus and risers at Daleville station and replace bus and risers at Madison		AEP (100%)
b1435 Replace the 2870 MCM ACSR riser at the Sporn station		AEP (100%)
b1436 Perform a sag study on the Sorenson – Illinois Road 138 kV line to increase the emergency MOT for this line. Replace bus and risers at Illinois Road		AEP (100%)
b1437 Perform sag study on Rock Cr. – Hummel Cr. 138 kV to increase the emergency MOT for the line, replace bus and risers at Huntington J., and replace relays for Hummel Cr. – Hunt – Soren. Line at Soren		AEP (100%)
b1438 Replacement of risers at McKinley and Industrial Park stations and performance of a sag study for the 4.53 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA		AEP (100%)
b1439 By replacing the risers at Lincoln both the Summer Normal and Summer Emergency ratings will improve to 268 MVA		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1440	By replacing the breakers at Lincoln the Summer Emergency rating will improve to 251 MVA	AEP (100%)
b1441	Replacement of risers at South Side and performance of a sag study for the 1.91 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1442	Replacement of 954 ACSR conductor with 1033 ACSR and performance of a sag study for the 4.54 miles of 2-636 ACSR section is expected	AEP (100%)
b1443	Station work at Thelma and Busseyville Stations will be performed to replace bus and risers	AEP (100%)
b1444	Perform electrical clearance studies on Clinch River – Clinchfield 139 kV line (a.k.a. sag studies) to determine if the emergency ratings can be utilized	AEP (100%)
b1445	Perform a sag study on the Addison (Buckeye CO-OP) – Thinever and North Crown City – Thivener 138 kV sag study and switch	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1446	Perform a sag study on the Parkersburg (Allegheny Power) – Belpre (AEP) 138 kV	AEP (100%)
b1447	Dexter – Elliot tap 138 kV sag check	AEP (100%)
b1448	Dexter – Meigs 138 kV Electrical Clearance Study	AEP (100%)
b1449	Meigs tap – Rutland 138 kV sag check	AEP (100%)
b1450	Muskingum – North Muskingum 138 kV sag check	AEP (100%)
b1451	North Newark – Sharp Road 138 kV sag check	AEP (100%)
b1452	North Zanesville – Zanesville 138 kV sag check	AEP (100%)
b1453	North Zanesville – Powelson and Ohio Central – Powelson 138 kV sag check	AEP (100%)
b1454	Perform an electrical clearance study on the Ross – Delano – Scioto Trail 138 kV line to determine if the emergency rating can be utilized	AEP (100%)
b1455	Perform a sag check on the Sunny – Canton Central – Wagenhals 138 kV line to determine if all circuits can be operated at their summer emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1456	The Tidd – West Bellaire 345 kV circuit has been de-rated to its normal rating and would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)
b1457	The Tiltonsville – Windsor 138 kV circuit has been derated to its normal rating and would need an electrical clearance study to determine if the emergency rating could be utilized	AEP (100%)
b1458	Install three new 345 kV breakers at Bixby to separate the Marquis 345 kV line and transformer #2. Operate Circleville – Harrison 138 kV and Harrison – Zuber 138 kV up to conductor emergency ratings	AEP (100%)
b1459	Several circuits have been de-rated to their normal conductor ratings and could benefit from electrical clearance studies to determine if the emergency rating could be utilized	AEP (100%)
b1460	Replace 2156 & 2874 risers	AEP (100%)
b1461	Replace meter, metering CTs and associated equipment at the Paden City feeder	AEP (100%)
b1462	Replace relays at both South Cadiz 138 kV and Tidd 138 kV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1463	Reconductor the Bexley – Groves 138 kV circuit	AEP (100%)
b1464	Corner 138 kV upgrades	AEP (100%)
b1465.1	Add a 3rd 2250 MVA 765/345 kV transformer at Sullivan station	AEC (0.71%) / AEP (75.06%) / APS (1.25%) / BGE (1.81%) / ComEd (5.91%) / Dayton (0.86%) / DL (1.23%) / DPL (0.95%) / Dominion (3.89%) / JCPL (1.58%) / NEPTUNE (0.15%) / HTP (0.07%) / PECO (2.08%) / PEPCO (1.66%) / ECP (0.07%)** / PSEG (2.62%) / RE (0.10%)
b1465.2	Replace the 100 MVAR 765 kV shunt reactor bank on Rockport – Jefferson 765 kV line with a 300 MVAR bank at Rockport Station	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (100%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1465.3	Transpose the Rockport – Sullivan 765 kV line and the Rockport – Jefferson 765 kV line	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEP (100%)</p>
b1465.4	Make switching improvements at Sullivan and Jefferson 765 kV stations	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEP (100%)</p>
b1466.1	Create an in and out loop at Adams Station by removing the hard tap that currently exists	AEP (100%)
b1466.2	Upgrade the Adams transformer to 90 MVA	AEP (100%)



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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1466.3	At Seaman Station install a new 138 kV bus and two new 138 kV circuit breakers	AEP (100%)
b1466.4	Convert South Central Co-op's New Market 69 kV Station to 138 kV	AEP (100%)
b1466.5	The Seaman – Highland circuit is already built to 138 kV, but is currently operating at 69 kV, which would now increase to 138 kV	AEP (100%)
b1466.6	At Highland Station, install a new 138 kV bus, three new 138 kV circuit breakers and a new 138/69 kV 90 MVA transformer	AEP (100%)
b1466.7	Using one of the bays at Highland, build a 138 kV circuit from Hillsboro – Highland 138 kV, which is approximately 3 miles	AEP (100%)
b1467.1	Install a 14.4 MVar Capacitor Bank at New Buffalo station	AEP (100%)
b1467.2	Reconfigure the 138 kV bus at LaPorte Junction station to eliminate a contingency resulting in loss of two 138 kV sources serving the LaPorte area	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1468.1	Expand Selma Parker Station and install a 138/69/34.5 kV transformer	AEP (100%)
b1468.2	Rebuild and convert 34.5 kV line to Winchester to 69 kV, including Farmland Station	AEP (100%)
b1468.3	Retire the 34.5 kV line from Haymond to Selma Wire	AEP (100%)
b1469.1	Conversion of the Newcomerstown – Cambridge 34.5 kV system to 69 kV operation	AEP (100%)
b1469.2	Expansion of the Derwent 69 kV Station (including reconfiguration of the 69 kV system)	AEP (100%)
b1469.3	Rebuild 11.8 miles of 69 kV line, and convert additional 34.5 kV stations to 69 kV operation	AEP (100%)
b1470.1	Build a new 138 kV double circuit off the Kanawha – Bailysville #2 138 kV circuit to Skin Fork Station	AEP (100%)
b1470.2	Install a new 138/46 kV transformer at Skin Fork	AEP (100%)
b1470.3	Replace 5 Moab's on the Kanawha – Baileysville line with breakers at the Sundial 138 kV station	AEP (100%)
b1471	Perform a sag study on the East Lima – For Lima – Rockhill 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1472	Perform a sag study on the East Lima – Haviland 138 kV line to increase the emergency rating	AEP (100%)
b1473	Perform a sag study on the East New Concord – Muskingum River section of the Muskingum River – West Cambridge 138 kV circuit	AEP (100%)
b1474	Perform a sag study on the Ohio Central – Prep Plant tap 138 kV circuit	AEP (100%)
b1475	Perform a sag study on the S73 – North Delphos 138 kV line to increase the emergency rating	AEP (100%)
b1476	Perform a sag study on the S73 – T131 138 kV line to increase the emergency rating	AEP (100%)
b1477	The Natrium – North Martin 138 kV circuit would need an electrical clearance study among other equipment upgrades	AEP (100%)
b1478	Upgrade Strouds Run – Strouds Tap 138 kV relay and riser	AEP (100%)
b1479	West Hebron station upgrades	AEP (100%)
b1480	Perform upgrades and a sag study on the Corner – Layman 138 kV section of the Corner – Muskingum River 138 kV circuit	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1481	Perform a sag study on the West Lima – Eastown Road – Rockhill 138 kV line and replace the 138 kV risers at Rockhill station to increase the emergency rating	AEP (100%)
b1482	Perform a sag study for the Albion – Robison Park 138 kV line to increase its emergency rating	AEP (100%)
b1483	Sag study 1 mile of the Clinch River – Saltville 138 kV line and replace the risers and bus at Clinch River, Lebanon and Elk Garden Stations	AEP (100%)
b1484	Perform a sag study on the Hacienda – Harper 138 kV line to increase the emergency rating	AEP (100%)
b1485	Perform a sag study on the Jackson Road – Concord 183 kV line to increase the emergency rating	AEP (100%)
b1486	The Matt Funk – Poages Mill – Starkey 138 kV line requires	AEP (100%)
b1487	Perform a sag study on the New Carlisle – Trail Creek 138 kV line to increase the emergency rating	AEP (100%)
b1488	Perform a sag study on the Olive – LaPorte Junction 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1489	A sag study must be performed for the 5.40 mile Tristate – Chadwick 138 kV line to determine if a higher emergency rating can be used	AEP (100%)
b1490.1	Establish a new 138/69 kV Butler Center station	AEP (100%)
b1490.2	Build a new 14 mile 138 kV line from Auburn station to Woods Road station VIA Butler Center station	AEP (100%)
b1490.3	Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer	AEP (100%)
b1490.4	Improve the switching arrangement at Kendallville station	AEP (100%)
b1491	Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line	AEP (100%)
b1492	Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR	AEP (100%)
b1493	Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating	AEP (100%)
b1494	Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to increase its emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1495	Add an additional 765/345 kV transformer at Baker Station	AEC (0.41%) / AEP (87.22%) / BGE (1.03%) / ComEd (3.38%) / Dayton (1.23%) / DL (1.46%) / DPL (0.54%) / JCPL (0.90%) / NEPTUNE (0.09%) / HTP (0.04%) / PECO (1.18%) / PEPCO (0.94%) / ECP** (0.04%) / PSEG (1.48%) / RE (0.06%)
b1496	Replace 138 kV bus and risers at Johnson Mountain Station	AEP (100%)
b1497	Replace 138 kV bus and risers at Leesville Station	AEP (100%)
b1498	Replace 138 kV risers at Wurno Station	AEP (100%)
b1499	Perform a sag study on Sporn A – Gavin 138 kV to determine if the emergency rating can be improved	AEP (100%)
b1500	The North East Canton – Wagenhals 138 kV circuit would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)
b1501	The Moseley – Reusens 138 kV circuit requires a sag study to determine if the emergency rating can be utilized to address a thermal loading issue for a category C3	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1502	Reconductor the Conesville East – Conesville Prep Plant Tap 138 kV section of the Conesville – Ohio Central to fix Reliability N-1-1 thermal overloads		AEP (100%)
b1659	Establish Sorenson 345/138 kV station as a 765/345 kV station		AEP (93.61%) / ATSI (2.99%) / ComEd (2.07%) / HTP (0.03%) / PENELEC (0.31%) / ECP** (0.03%) / PSEG (0.92%) / RE (0.04%)
b1659.1	Replace Sorenson 138 kV breaker 'L1'		AEP (100%)
b1659.2	Replace Sorenson 138 kV breaker 'L2' breaker		AEP (100%)
b1659.3	Replace Sorenson 138 kV breaker 'M1'		AEP (100%)
b1659.4	Replace Sorenson 138 kV breaker 'M2'		AEP (100%)
b1659.5	Replace Sorenson 138 kV breaker 'N1'		AEP (100%)
b1659.6	Replace Sorenson 138 kV breaker 'N2'		AEP (100%)
b1659.7	Replace Sorenson 138 kV breaker 'O1'		AEP (100%)
b1659.8	Replace Sorenson 138 kV breaker 'O2'		AEP (100%)
b1659.9	Replace Sorenson 138 kV breaker 'M'		AEP (100%)
b1659.10	Replace Sorenson 138 kV breaker 'N'		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1659.11	Replace Sorenson 138 kV breaker 'O'	AEP (100%)
b1659.12	Replace McKinley 138 kV breaker 'L1'	AEP (100%)
b1659.13	Establish 765 kV yard at Sorenson and install four 765 kV breakers	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (76.55%) / Dayton (7.81%) / DEOK (15.64%)</u>
b1659.14	Build approximately 14 miles of 765 kV line from existing Dumont - Marysville line	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (64.15%) / ATSI (18.55%) / ComEd (4.15%) / Dayton (6.57%) / DL (6.27%) / EKPC (0.31%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1660	Install a 765/500 kV transformer at Cloverdale	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (57.93%) / DEOK (0.07%) / Dominion (0.12%) / EKPC (0.02%) / PEPCO (41.86%)</u></p>
b1661	Install a 765 kV circuit breaker at Wyoming station	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEP (100%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1662	Rebuild 4 miles of 46 kV line to 138 kV from Pemberton to Cherry Creek	AEP (100%)
b1662.1	Circuit Breakers are installed at Cherry Creek (facing Pemberton) and at Pemberton (facing Tams Mtn. and Cherry Creek)	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1662.2	Install three 138 kV breakers at Grandview Station (facing Cherry Creek, Hinton, and Bradley Stations)	AEP (100%)
b1662.3	Remove Sullivan Switching Station (46 kV)	AEP (100%)
b1663	Install a new 765/138 kV transformer at Jackson Ferry substation	AEP (100%)
b1663.1	Establish a new 10 mile double circuit 138 kV line between Jackson Ferry and Wythe	AEP (100%)
b1663.2	Install 2 765 kV circuit breakers, breaker disconnect switches and associated bus work for the new 765 kV breakers, and new relays for the 765 kV breakers at Jackson's Ferry	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (100%)</u>
b1664	Install switched capacitor banks at Kenwood 138 kV stations	AEP (100%)
b1665	Install a second 138/69 kV transformer at Thelma station	AEP (100%)
b1665.1	Construct a single circuit 69 kV line from West Paintsville to the new Paintsville station	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1665.2	Install new 7.2 MVAR, 46 kV bank at Kenwood Station	AEP (100%)
b1666	Build an 8 breaker 138 kV station tapping both circuits of the Fostoria - East Lima 138 kV line	AEP (90.65%) / Dayton (9.35%)
b1667	Establish Melmore as a switching station with both 138 kV circuits terminating at Melmore. Extend the double circuit 138 kV line from Melmore to Fremont Center	AEP (100%)
b1668	Revise the capacitor setting at Riverside 138 kV station	AEP (100%)
b1669	Capacitor setting changes at Ross 138 kV stations	AEP (100%)
b1670	Capacitor setting changes at Wooster 138 kV station	AEP (100%)
b1671	Install four 138 kV breakers in Danville area	AEP (100%)
b1676	Replace Natrium 138 kV breaker 'G (rehab)'	AEP (100%)
b1677	Replace Huntley 138 kV breaker '106'	AEP (100%)
b1678	Replace Kammer 138 kV breaker 'G'	AEP (100%)
b1679	Replace Kammer 138 kV breaker 'H'	AEP (100%)
b1680	Replace Kammer 138 kV breaker 'J'	AEP (100%)
b1681	Replace Kammer 138 kV breaker 'K'	AEP (100%)
b1682	Replace Kammer 138 kV breaker 'M'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1683	Replace Kammer 138 kV breaker 'N'	AEP (100%)
b1684	Replace Clinch River 138 kV breaker 'E1'	AEP (100%)
b1685	Replace Lincoln 138 kV breaker 'D'	AEP (100%)
b1687	Advance s0251.7 (Replace Corrid 138 kV breaker '104S')	AEP (100%)
b1688	Advance s0251.8 (Replace Corrid 138 kV breaker '104C')	AEP (100%)
b1712.1	Perform sag study on Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1712.2	Rebuild the Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1733	Perform a sag study of the Bluff Point - Jauy 138 kV line. Upgrade breaker, wavetrap, and risers at the terminal ends	AEP (100%)
b1734	Perform a sag study of Randolph - Hodgins 138 kV line. Upgrade terminal equipment	AEP (100%)
b1735	Perform a sag study of R03 - Magely 138 kV line. Upgrade terminal equipment	AEP (100%)
b1736	Perform a sag study of the Industrial Park - Summit 138 kV line	AEP (100%)
b1737	Sag study of Newcomerstown - Hillview 138 kV line. Upgrade -terminal equipment	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1738	Perform a sag study of the Wolf Creek - Layman 138 kV line. - Upgrade terminal equipment including a 138 kV breaker and wavetrapp	AEP (100%)
b1739	Perform a sag study of the Ohio Central - West Trinway 138 kV line	AEP (100%)
b1741	Replace Beatty 138 kV breaker '2C(IPP)'	AEP (100%)
b1742	Replace Beatty 138 kV breaker '1E'	AEP (100%)
b1743	Replace Beatty 138 kV breaker '2E'	AEP (100%)
b1744	Replace Beatty 138 kV breaker '3C'	AEP (100%)
b1745	Replace Beatty 138 kV breaker '2W'	AEP (100%)
b1746	Replace St. Claire 138 kV breaker '8'	AEP (100%)
b1747	Replace Cloverdale 138 kV breaker 'C'	AEP (100%)
b1748	Replace Cloverdale 138 kV breaker 'D1'	AEP (100%)
b1780	Install two 138kV breakers and two 138kV circuit switchers at South Princeton Station and one 138kV breaker and one 138kV circuit switcher at Switchback Station	AEP (100%)
b1781	Install three 138 kV breakers and a 138kV circuit switcher at Trail Fork Station in Pineville, WV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1782	Install a 46kV Moab at Montgomery Station facing Carbondale (on the London - Carbondale 46 kV circuit)	AEP (100%)
b1783	Add two 138 kV Circuit Breakers and two 138 kV circuit switchers on the Lonesome Pine - South Bluefield 138 kV line	AEP (100%)
b1784	Install a 52.8 MVAR capacitor bank at the Clifford 138 kV station	AEP (100%)
b1811.1	Perform a sag study of 4 miles of the Waterford - Muskingum line	AEP (100%)
b1811.2	Rebuild 0.1 miles of Waterford - Muskingum 345 kV with 1590 ACSR	AEP (100%)
b1812	Reconductor the AEP portion of the South Canton - Harmon 345 kV with 954 ACSR and upgrade terminal equipment at South Canton. Expected rating is 1800 MVA S/N and 1800 MVA S/E	AEP (100%)
b1817	Install (3) 345 kV circuit breakers at East Elkhart station in ring bus designed as a breaker and half scheme	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1818	Expand the Allen station by installing a second 345/138 kV transformer and adding four 138 kV exits by cutting in the Lincoln - Sterling and Milan - Timber Switch 138 kV double circuit tower line	AEP (88.30%) / ATSI (8.86%) / Dayton (2.84%)
b1819	Rebuild the Robinson Park - Sorenson 138 kV line corridor as a 345 kV double circuit line with one side operated at 345 kV and one side at 138 kV	AEP (87.18%) / ATSI (10.06%) / Dayton (2.76%)
b1859	Perform a sag study for Hancock - Cave Spring - Roanoke 138 kV circuit to reach new SE ratings of 272MVA (Cave Spring-Hancock), 205MVA (Cave Spring-Sunscape), 245MVA (ROANO2-Sunscape)	AEP (100%)
b1860	Perform a sag study on the Crooksville - Spencer Ridge section (14.3 miles) of the Crooksville-Poston-Strouds Run 138 kV circuit to see if any remedial action needed to reach the SE rating (175MVA)	AEP (100%)
b1861	Reconductor 0.83 miles of the Dale - West Canton 138 kV Tie-line and upgrade risers at West Canton 138 kV	AEP (100%)
b1862	Perform a sag study on the Grant - Greentown 138 kV circuit and replace the relay CT at Grant 138 kV station to see if any remedial action needed to reach the new ratings of 251/286MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1863	Perform a sag study of the Kammer - Wayman SW 138 kV line to see if any remedial action needed to reach the new SE rating of 284MVA	AEP (100%)
b1864.1	Add two additional 345/138 kV transformers at Kammer	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.2	Add second West Bellaire - Brues 138 kV circuit	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.3	Replace Kammer 138 kV breaker 'E'	AEP (100%)
b1865	Perform a sag study on the Kanawha - Carbondale 138 kV line to see if any remedial action needed to reach the new ratings of 251/335MVA	AEP (100%)
b1866	Perform a sag study on the Clinch River-Lock Hart-Dorton 138kV line,increase the Relay Compliance Trip Limit at Clinch River on the C.R.-Dorton 138kV line to 310 and upgrade the risers with 1590ACSR	AEP (100%)
b1867	Perform a sag study on the Newcomerstown - South Coshocton 138 kV line to see if any remedial action is needed to reach the new SE rating of 179MVA	AEP (100%)
b1868	Perform sag study on the East Lima - new Liberty 138 kV line to see if any remedial action is needed to reach the new SE rating of 219MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1869	Perform a sag study of the Ohio Central - South Coshocton 138 kV circuit to see if any remedial action needed to reach the new SE ratings of 250MVA	AEP (100%)
b1870	Replace the Ohio Central transformer #1 345/138/12 kV 450 MVA for a 345/138/34.5 kV 675 MVA transformer	AEP (68.16%) / ATSI (25.27%) / Dayton (3.88%) / PENELEC (1.59%) / DEOK (1.10%)
b1871	Perform a sag study on the Central - West Coshocton 138 kV line (improving the emergency rating of this line to 254 MVA)	AEP (100%)
b1872	Add a 57.6 MVAR capacitor bank at East Elkhart 138 kv station in Indiana	AEP (100%)
b1873	Install two 138 kV circuit breakers at Cedar Creek Station and primary side circuit switcher on the 138/69/46 kV transformer	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1874	Install two 138 kV circuit breakers and one 138 kV circuit switcher at Magely 138 kV station in Indiana	AEP (100%)
b1875	Build 25 miles of new 138 kV line from Bradley Station through Tower 117 Station and terminating at McClung 138 kV station. Existing 69 kV distribution transformers will be replaced with 138 kV transformers	AEP (100%)
b1876	Install a 14.4 MVar capacitor bank at Capital Avenue (AKA Currant Road) 34.5 kV bus	AEP (100%)
b1877	Relocate 138 kV Breaker G to the West Kingsport - Industry Drive 138 kV line and Remove 138 kV MOAB	AEP (100%)
b1878	Perform a sag study on the Lincoln - Robinson Park 138 kV line (Improve the emergency rating to 244 MVA)	AEP (100%)
b1879	Perform a sag study on the Hansonville - Meadowview 138 kV line (Improve the emergency rating to 245 MVA)	AEP (100%)
b1880	Rebuild the 15 miles of the Moseley - Roanoke 138 kV line. This project would consist of rebuilding both circuits on the double circuit line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1881	Replace existing 600 Amp switches, station risers and increase the CT ratios associated with breaker 'G' at Sterling 138 kV Station. It will increase the rating to 296 MVA S/N and 384 MVA S/E	AEP (100%)
b1882	Perform a sag study on the Bluff Point - Randolph 138 kV line to see if any remedial action needed to reach the new SE rating of 255 MVA	AEP (100%)
b1883	Switch the breaker position of transformer #1 and SW Lima at East Lima 345 kV bus	AEP (100%)
b1884	Perform a sag study on Strawton station - Fisher Body - Deer Creek 138 kV line to see if any remedial action needed to reach the new SE rating of 250 MVA	AEP (100%)
b1887	Establish a new 138/69 kV source at Carrollton and construct two new 69 kV lines from Carrollton to tie into the Dennison - Miller SW 69 kV line and to East Dover 69 kV station respectively	AEP (100%)
b1888	Install a 69 kV line breaker at Blue Pennant 69 kV Station facing Bim Station and 14.4 MVar capacitor bank	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1889	Install a 43.2 MVAR capacitor bank at Hinton 138 kV station (APCO WV)	AEP (100%)
b1901	Rebuild the Ohio Central - West Trinway (4.84 miles) section of the Academia - Ohio Central 138 kV circuit. Upgrade the Ohio Central riser, Ohio Central switch and the West Trinway riser	AEP (100%)
b1904.1	Construct new 138/69 Michiana Station near Bridgman by tapping the new Carlisle - Main Street 138 kV and the Bridgman - Buchanan Hydro 69 kV line	AEP (100%)
b1904.2	Establish a new 138/12 kV New Galien station by tapping the Olive - Hickory Creek 138 kV line	AEP (100%)
b1904.3	Retire the existing Galien station and move its distribution load to New Galien station. Retire the Buchanan Hydro - New Carlisle 34.5 kV line	AEP (100%)
b1904.4	Implement an in and out scheme at Cook 69 kV by eliminating the Cook 69 kV tap point and by installing two new 69 kV circuit breakers	AEP (100%)
b1904.5	Rebuild the Bridgman - Cook 69 kV and the Derby - Cook 69 kV lines	AEP (100%)
b1946	Perform a sag study on the Brues - West Bellaire 138 kV line	AEP (100%)
b1947	A sag study of the Dequine - Meadowlake 345 kV line #1 line may improve the emergency rating to 1400 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1948	Establish a new 765/345 interconnection at Sporn. Install a 765/345 kV transformer at Mountaineer and build ¾ mile of 345 kV to Sporn	ATSI (61.08%) / DL (21.87%) / Dominion (13.97%) / PENELEC (3.08%)
b1949	Perform a sag study on the Grant Tap – Deer Creek 138 kV line and replace bus and risers at Deer Creek station	AEP (100%)
b1950	Perform a sag study on the Kammer – Ormet 138 kV line of the conductor section	AEP (100%)
b1951	Perform a sag study of the Maddox- Convoy 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1952	Perform a sag study of the Maddox – T130 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1953	Perform a sag study of the Meadowlake - Olive 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1954	Perform a sag study on the Milan - Harper 138 kV line and replace bus and switches at Milan Switch station	AEP (100%)
b1955	Perform a sag study of the R-049 - Tillman 138 kV line may improve the emergency rating to 245 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1956	Perform a sag study of the Tillman - Dawkins 138 kV line may improve the emergency rating to 245 MVA	AEP (100%)
b1957	Terminate Transformer #2 at SW Lima in a new bay position	AEP (69.41%) / ATSI (23.11%) / ECP** (0.17%) / HTP (0.19%) / PENELEC (2.42%) / PSEG (4.52%) / RE (0.18%)
b1958	Perform a sag study on the Brookside - Howard 138 kV line and replace bus and risers at AEP Howard station	AEP (100%)
b1960	Sag Study on 7.2 miles SE Canton-Canton Central 138kV ckt	AEP (100%)
b1961	Sag study on the Southeast Canton – Sunnyside 138kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1962	Add four 765 kV breakers at Kammer	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  AEP (100%)</p>
b1963	Build approximately 1 mile of circuit comprising of 2-954 ACSR to get the rating of Waterford-Muskinum 345 kV higher	AEP (100%)
b1970	Reconductor 13 miles of the Kammer – West Bellaire 345kV circuit	APS (33.51%) / ATSI (32.21%) / DL (18.64%) / Dominion (6.01%) / ECP** (0.10%) / HTP (0.11%) / JCPL (1.68%) / Neptune* (0.18%) / PENELEC (4.58%) / PSEG (2.87%) / RE (0.11%)
b1971	Perform a sag study to improve the emergency rating on the Bridgville – Chandlersville 138 kV line	AEP (100%)
b1972	Replace disconnect switch on the South Canton 765/345 kV transformer	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1973	Perform a sag study to improve the emergency rating on the Carrollton – Sunnyside 138 kV line	AEP (100%)
b1974	Perform a sag study to improve the emergency rating on the Bethel Church – West Dover 138 kV line	AEP (100%)
b1975	Replace a switch at South Millersburg switch station	AEP (100%)
b2017	Reconductor or rebuild Sporn - Waterford - Muskingum River 345 kV line	ATSI (37.04%) / AEP (34.35%) / DL (10.41%) / Dominion (6.19%) / APS (3.94%) / PENELEC (3.09%) / JCPL (1.39%) / Dayton (1.20%) / Neptune* (0.14%) / HTP (0.09%) / ECP** (0.08%) / PSEG (2.00%) / RE (0.08%)
b2018	Loop Conesville - Bixby 345 kV circuit into Ohio Central	ATSI (58.58%) / AEP (14.16%) / APS (12.88%) / DL (7.93%) / PENELEC (5.73%) / Dayton (0.72%)
b2019	Establish Burger 345/138 kV station	AEP (93.74%) / APS (4.40%) / DL (1.11%) / ATSI (0.74%) / PENELEC (0.01%)
b2020	Rebuild Amos - Kanawah River 138 kV corridor	AEP (88.39%) / APS (7.12%) / ATSI (2.89%) / DEOK (1.58%) / PEPCO (0.02%)
b2021	Add 345/138 transformer at Sporn, Kanawah River & Muskingum River stations	AEP (91.92%) / DEOK (3.60%) / APS (2.19%) / ATSI (1.14%) / DL (1.08%) / PEPCO (0.04%) / BGE (0.03%)
b2021.1	Replace Kanawah 138 kV breaker 'L'	AEP (100%)
b2021.2	Replace Muskingum 138 kV breaker 'HG'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2021.3	Replace Muskingum 138 kV breaker 'HJ'	AEP (100%)
b2021.4	Replace Muskingum 138 kV breaker 'HE'	AEP (100%)
b2021.5	Replace Muskingum 138 kV breaker 'HD'	AEP (100%)
b2021.6	Replace Muskingum 138 kV breaker 'HF'	AEP (100%)
b2021.7	Replace Muskingum 138 kV breaker 'HC'	AEP (100%)
b2021.8	Replace Sporn 138 kV breaker 'D1'	AEP (100%)
b2021.9	Replace Sporn 138 kV breaker 'D2'	AEP (100%)
b2021.10	Replace Sporn 138 kV breaker 'F1'	AEP (100%)
b2021.11	Replace Sporn 138 kV breaker 'F2'	AEP (100%)
b2021.12	Replace Sporn 138 kV breaker 'G'	AEP (100%)
b2021.13	Replace Sporn 138 kV breaker 'G2'	AEP (100%)
b2021.14	Replace Sporn 138 kV breaker 'N1'	AEP (100%)
b2021.15	Replace Kanawah 138 kV breaker 'M'	AEP (100%)
b2022	Terminate Tristate - Kyger Creek 345 kV line at Sporn	AEP (97.99%) / DEOK (2.01%)
b2027	Perform a sag study of the Tidd - Collier 345 kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2028	Perform a sag study on East Lima - North Woodcock 138 kV line to improve the rating	AEP (100%)
b2029	Perform a sag study on Bluebell - Canton Central 138 kV line to improve the rating	AEP (100%)
b2030	Install 345 kV circuit breakers at West Bellaire	AEP (100%)
b2031	Sag study on Tilton - W. Bellaire section 1 (795 ACSR), about 12 miles	AEP (100%)
b2032	Rebuild 138 kV Elliot tap - Poston line	ATSI (73.02%) / Dayton (19.39%) / DL (7.59%)
b2033	Perform a sag study of the Brues - W. Bellaire 138 kV line	AEP (100%)
b2046	Adjust tap settings for Muskingum River transformers	AEP (100%)
b2047	Replace relay at Greenlawn	AEP (100%)
b2048	Replace both 345/138 kV transformers with one bigger transformer	AEP (92.49%) / Dayton (7.51%)
b2049	Replace relay	AEP (100%)
b2050	Perform sag study	AEP (100%)
b2051	Install 3 138 kV breakers and a circuit switcher at Dorton station	AEP (100%)
b2052	Replace transformer	AEP (67.17%) / ATSI (27.37%) / Dayton (3.73%) / PENELEC (1.73%)
b2054	Perform a sag study of Sporn - Rutland 138 kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2069	Replace George Washington 138 kV breaker 'A' with 63kA rated breaker	AEP (100%)
b2070	Replace Harrison 138 kV breaker '6C' with 63kA rated breaker	AEP (100%)
b2071	Replace Lincoln 138 kV breaker 'L' with 63kA rated breaker	AEP (100%)
b2072	Replace Natrum 138 kV breaker 'T' with 63kA rated breaker	AEP (100%)
b2073	Replace Darrah 138 kV breaker 'B' with 63kA rated breaker	AEP (100%)
b2074	Replace Wyoming 138 kV breaker 'G' with 80kA rated breaker	AEP (100%)
b2075	Replace Wyoming 138 kV breaker 'G1' with 80kA rated breaker	AEP (100%)
b2076	Replace Wyoming 138 kV breaker 'G2' with 80kA rated breaker	AEP (100%)
b2077	Replace Wyoming 138 kV breaker 'H' with 80kA rated breaker	AEP (100%)
b2078	Replace Wyoming 138 kV breaker 'H1' with 80kA rated breaker	AEP (100%)
b2079	Replace Wyoming 138 kV breaker 'H2' with 80kA rated breaker	AEP (100%)
b2080	Replace Wyoming 138 kV breaker 'J' with 80kA rated breaker	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2081	Replace Wyoming 138 kV breaker 'J1' with 80kA rated breaker	AEP (100%)
b2082	Replace Wyoming 138 kV breaker 'J2' with 80kA rated breaker	AEP (100%)
b2083	Replace Natrum 138 kV breaker 'K' with 63kA rated breaker	AEP (100%)
b2084	Replace Tanner Creek 345 kV breaker 'P' with 63kA rated breaker	AEP (100%)
b2085	Replace Tanner Creek 345 kV breaker 'P2' with 63kA rated breaker	AEP (100%)
b2086	Replace Tanner Creek 345 kV breaker 'Q1' with 63kA rated breaker	AEP (100%)
b2087	Replace South Bend 138 kV breaker 'T' with 63kA rated breaker	AEP (100%)
b2088	Replace Tidd 138 kV breaker 'L' with 63kA rated breaker	AEP (100%)
b2089	Replace Tidd 138 kV breaker 'M2' with 63kA rated breaker	AEP (100%)
b2090	Replace McKinley 138 kV breaker 'A' with 40kA rated breaker	AEP (100%)
b2091	Replace West Lima 138 kV breaker 'M' with 63kA rated breaker	AEP (100%)
b2092	Replace George Washington 138 kV breaker 'B' with 63kA rated breaker	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2093	Replace Turner 138 kV breaker 'W' with 63kA rated breaker	AEP (100%)
b2135	Build a new 138 kV line from Falling Branch to Merrimac and add a 138/69 kV transformer at Merrimac Station	AEP (100%)
b2160	Add a fourth circuit breaker to the station being built for the U4-038 project (Conelley), rebuild U4-038 - Grant Tap line as double circuit tower line	AEP (100%)
b2161	Rebuild approximately 20 miles of the Allen - S073 double circuit 138 kV line (with one circuit from Allen - Tillman - Timber Switch - S073 and the other circuit from Allen - T-131 - S073) utilizing 1033 ACSR	AEP (100%)
b2162	Perform a sag study to improve the emergency rating of the Belpre - Degussa 138 kV line	AEP (100%)
b2163	Replace breaker and wavetrapp at Jay 138 kV station	AEP (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

## SCHEDULE 12 – APPENDIX

### (20) Virginia Electric and Power Company

Required Transmission Enhancements		Annual Revenue Requirement***	Responsible Customer(s)
b0217	Upgrade Mt. Storm - Doubs 500kV		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)</u>
b0222	Install 150 MVAR capacitor at Loudoun 500 kV		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>Dominion (88.62%) / PEPCO (11.38%)</u>

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\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

\*\*\*\* The Annual Revenue Requirement for all Virginia Electric and Power Company projects in this Section 20 shall be as specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B.

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0223	Install 150 MVAR capacitor at Asburn 230 kV		Dominion (100%)
b0224	Install 150 MVAR capacitor at Dranesville 230 kV		Dominion (100%)
b0225	Install 33 MVAR capacitor at Possum Pt. 115 kV		Dominion (100%)
b0226	Install 500/230 kV transformer at Clifton and Clifton 500 kV 150 MVAR capacitor	As specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B	APS (3.69%) / BGE (3.54%) / Dominion (85.73%) / PEPCO (7.04%)
b0227	Install 500/230 kV transformer at Bristers; build new 230 kV Bristers-Gainsville circuit, upgrade two Loudoun-Brambleton circuits		AEC (0.71%) / APS (3.36%) / BGE (10.93%) / DPL (1.66%) / Dominion (67.38%) / ME (0.89%) / PECO (2.33%) / PEPCO (12.20%) / PPL (0.54%)
b0227.1	Loudoun Sub – upgrade 6-230 kV breakers		Dominion (100%)



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0231	Install 500 kV breakers & 500 kV bus work at Suffolk		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <b><u>Dominion (100%)</u></b>
b0231.2	Install 500/230 kV Transformer, 230 kV breakers, & 230 kV bus work at Suffolk		Dominion (100%)
b0232	Install 150 MVAR capacitor at Lynnhaven 230 kV		Dominion (100%)
b0233	Install 150 MVAR capacitor at Landstown 230 kV		Dominion (100%)
b0234	Install 150 MVAR capacitor at Greenwich 230 kV		Dominion (100%)
b0235	Install 150 MVAR capacitor at Fentress 230 kV		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0307	Reconductor Endless Caverns – Mt. Jackson 115 kV		Dominion (100%)
b0308	Replace L breaker and switches at Endless Caverns 115 kV		Dominion (100%)
b0309	Install SPS at Earleys 115 kV		Dominion (100%)
b0310	Reconductor Club House – South Hill and Chase City – South Hill 115 kV		Dominion (100%)
b0311	Reconductor Idylwood to Arlington 230 kV		Dominion (100%)
b0312	Reconductor Gallows to Ox 230 kV		Dominion (100%)
b0325	Install a 2 <sup>nd</sup> Everetts 230/115 kV transformer		Dominion (100%)
b0326	Uprate/resag Remington-Brandywine-Culppr 115 kV		Dominion (100%)
b0327	Build 2 <sup>nd</sup> Harrisonburg – Valley 230 kV		APS (19.79%) / Dominion (76.18%) / PEPCO (4.03%)
b0328.1	Build new Meadow Brook – Loudoun 500 kV circuit (30 of 50 miles)		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b><u>DFAX Allocation:</u></b> <u>Dominion (88.62%) / PEPCO (11.38%)</u>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.3	Upgrade Mt. Storm 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</u>
b0328.4	Upgrade Loudoun 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (88.62%) / PEPCO (11.38%)</u>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit	<p><b><u>Load Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>Dominion (100%)</u></b></p>
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit	Dominion (100%)††
b0329.1	Replace Thole Street 115 kV breaker ‘48T196’	Dominion (100%)
b0329.2	Replace Chesapeake 115 kV breaker ‘T242’	Dominion (100%)
b0329.3	Replace Chesapeake 115 kV breaker ‘8722’	Dominion (100%)
b0329.4	Replace Chesapeake 115 kV breaker ‘16422’	Dominion (100%)
b0330	Install Crewe 115 kV breaker and shift load from line 158 to 98	Dominion (100%)
b0331	Upgrade/resag Shell Bank – Whealton 115 kV (Line 165)	Dominion (100%)

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†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0332	Uprate/resag Chesapeake – Cradock 115 kV	Dominion (100%)
b0333	Replace wave trap on Elmont – Replace (Line #231)	Dominion (100%)
b0334	Uprate/resag Iron Bridge-Walmsley-Southwest 230 kV	Dominion (100%)
b0335	Build Chase City – Clarksville 115 kV	Dominion (100%)
b0336	Reconductor one span of Chesapeake – Dozier 115 kV close to Dozier substation	Dominion (100%)
b0337	Build Lexington 230 kV ring bus	Dominion (100%)
b0338	Replace Gordonsville 230/115 kV transformer for larger one	Dominion (100%)
b0339	Install Breaker at Doods 230 kV Sub	Dominion (100%)
b0340	Reconductor one span Peninsula – Magruder 115 kV close to Magruder substation	Dominion (100%)
b0341	Install a breaker at Northern Neck 115 kV	Dominion (100%)
b0342	Replace Trowbridge 230/115 kV transformer	Dominion (100%)
b0403	2 <sup>nd</sup> Doods 500/230 kV transformer addition	APS (3.35%) / BGE (4.22%) / DPL (1.10%) / Dominion (83.94%) / PEPCO (7.39%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0412	Retension Pruntytown – Mt. Storm 500 kV to a 3502 MVA rating	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (46.82%) / PEPCO (53.18%)</u></p>
b0450	Install 150 MVAR Capacitor at Fredricksburg 230 kV	Dominion (100%)
b0451	Install 25 MVAR Capacitor at Somerset 115 kV	Dominion (100%)
b0452	Install 150 MVAR Capacitor at Northwest 230 kV	Dominion (100%)
b0453.1	Convert Remington – Sowego 115 kV to 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.2	Add Sowego – Gainesville 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.3	Add Sowego 230/115 kV transformer	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0454	Reconductor 2.4 miles of Newport News – Chuckatuck 230 kV	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0455	Add 2 <sup>nd</sup> Endless Caverns 230/115 kV transformer	APS (32.70%) / BGE (7.01%) / DPL (1.80%) / Dominion (50.82%) / PEPCO (7.67%)
b0456	Reconductor 9.4 miles of Edinburg – Mt. Jackson 115 kV	APS (33.69%) / BGE (12.18%) / Dominion (40.08%) / PEPCO (14.05%)
b0457	Replace both wave traps on Dooks – Lexington 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>DEOK (1.12%) / Dominion (85.91%) / EKPC (0.33%) / PEPCO (12.64%)</u>
b0467.2	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.54%) / PEPCO (41.86%) / PPL (2.07%)

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**Virginia Electric and Power Company (cont.)**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.6	Replace Mount Storm 500 kV breaker 55072		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p>
			<p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0492.7	Replace Mount Storm 500 kV breaker 55172		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p>
			<p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.8	Replace Mount Storm 500 kV breaker H1172-2		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS</u>  <u>(9.22%) / BGE (4.41%) / DL</u>  <u>(0.02%) / DPL (6.88%) / Dominion</u>  <u>(10.77%) / ECP (0.44%) / JCPL</u>  <u>(11.59%) / ME (2.93%) /</u>  <u>NEPTUNE (1.11%) / PECO</u>  <u>(14.45%) / PEPCO (6.08%) / PPL</u>  <u>(6.36%) / PSEG (15.79%) / RE</u>  <u>(0.59%)</u></p>
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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.9	Replace Mount Storm 500 kV breaker G2T550	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>
b0492.10	Replace Mount Storm 500 kV breaker G2T554	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.11	Replace Mount Storm 500 kV breaker GIT551		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS</u>  <u>(9.22%) / BGE (4.41%) / DL</u>  <u>(0.02%) / DPL (6.88%) / Dominion</u>  <u>(10.77%) / ECP (0.44%) / JCPL</u>  <u>(11.59%) / ME (2.93%) /</u>  <u>NEPTUNE (1.11%) / PECO</u>  <u>(14.45%) / PEPCO (6.08%) / PPL</u>  <u>(6.36%) / PSEG (15.79%) / RE</u>  <u>(0.59%)</u></p>
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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.12	Upgrade nameplate rating of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</u></p>
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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**Virginia Electric and Power Company (cont.)**

**Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)**

b0512.5	Advance n0716 (Ox - Replace 230kV breaker L242)		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>
b0512.6	Advance n0717 (Possum Point - Replace 230kV breaker SC192)		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</u></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0583	Install dual primary protection schemes on Gosport lines 62 and 51 at the remote terminals (Chesapeake on the 62 line and Reeves Ave on the 51 line)	Dominion (100%)
b0756	Install a second 500/115 kV autotransformer at Chancellor 500 kV	Dominion (100%)
b0756.1	Install two 500 kV breakers at Chancellor 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0757	Reconductor one mile of Chesapeake – Reeves Avenue 115 kV line	Dominion (100%)
b0758	Install a second Fredericksburg 230/115 kV autotransformer	Dominion (100%)
b0760	Build 115 kV line from Kitty Hawk to Colington 115 kV (Colington on the existing line and Nag's Head and Light House DP on new line)	Dominion (100%)
b0761	Install a second 230/115 kV transformer at Possum Point	Dominion (100%)
b0762	Build a new Elko station and transfer load from Turner and Providence Forge stations	Dominion (100%)
b0763	Rebuild 17.5 miles of the line for a new summer rating of 262 MVA	Dominion (100%)
b0764	Increase the rating on 2.56 miles of the line between Greenwich and Thompson Corner; new rating to be 257 MVA	Dominion (100%)
b0765	Add a second Bull Run 230/115 kV autotransformer	Dominion (100%)
b0766	Increase the rating of the line between Loudoun and Cedar Grove to at least 150 MVA	Dominion (100%)
b0767	Extend the line from Old Church – Chickahominy 230 kV	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0768	Loop line #251 Idylwood – Arlington into the GIS sub	Dominion (100%)
b0769	Re-tension 15 miles of the line for a new summer rating of 216 MVA	Dominion (100%)
b0770	Add a second 230/115 kV autotransformer at Lanexa	Dominion (100%)
b0770.1	Replace Lanexa 115 kV breaker '8532'	Dominion (100%)
b0770.2	Replace Lanexa 115 kV breaker '9232'	Dominion (100%)
b0771	Build a parallel Chickahominy – Lanexa 230 kV line	Dominion (100%)
b0772	Install a second Elmont 230/115 kV autotransformer	Dominion (100%)
b0772.1	Replace Elmont 115 kV breaker '7392'	Dominion (100%)
b0774	Install a 33 MVAR capacitor at Bremo 115 kV	Dominion (100%)
b0775	Reconductor the Greenwich – Virginia Beach line to bring it up to a summer rating of 261 MVA; Reconductor the Greenwich – Amphibious Base line to bring it up to 291 MVA	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0776	Re-build Trowbridge – Winfall 115 kV	Dominion (100%)
b0777	Terminate the Thelma – Carolina 230 kV circuit into Lakeview 230 kV	Dominion (100%)
b0778	Install 29.7 MVAR capacitor at Lebanon 115 kV	Dominion (100%)
b0779	Build a new 230 kV line from Yorktown to Hayes but operate at 115 kV initially	Dominion (100%)
b0780	Reconductor Chesapeake – Yadkin 115 kV line	Dominion (100%)
b0781	Reconductor and replace terminal equipment on line 17 and replace the wave trap on line 88	Dominion (100%)
b0782	Install a new 115 kV capacitor at Dupont Waynesboro substation	Dominion (100%)
b0784	Replace wave traps on North Anna to Ladysmith 500 kV	<u><b>Load-Ratio Share Allocation:</b></u> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<u><b>DFAX Allocation:</b></u> <u>Dominion (100%)</u>
b0785	Rebuild the Chase City – Crewe 115 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0786	Reconductor the Moran DP – Crewe 115 kV segment	Dominion (100%)
b0787	Upgrade the Chase City – Twitty’s Creek 115 kV segment	Dominion (100%)
b0788	Reconductor the line from Farmville – Pamplin 115 kV	Dominion (100%)
b0793	Close switch 145T183 to network the lines. Rebuild the section of the line #145 between Possum Point – Minnieville DP 115 kV	Dominion (100%)
b0815	Replace Elmont 230 kV breaker '22192'	Dominion (100%)
b0816	Replace Elmont 230 kV breaker '21692'	Dominion (100%)
b0817	Replace Elmont 230 kV breaker '200992'	Dominion (100%)
b0818	Replace Elmont 230 kV breaker '2009T2032'	Dominion (100%)
b0837	At Mt. Storm, replace the existing MOD on the 500 kV side of the transformer with a circuit breaker	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (100%)</u>

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0888	Replace Loudoun 230 kV Cap breaker 'SC352'		Dominion (100%)
b0892	Replace Chesapeake 115 kV breaker SX522		Dominion (100%)
b0893	Replace Chesapeake 115 kV breaker T202		Dominion (100%)
b0894	Replace Possum Point 115 kV breaker SX-32		Dominion (100%)
b0895	Replace Possum Point 115 kV breaker L92-1		Dominion (100%)
b0896	Replace Possum Point 115 kV breaker L92-2		Dominion (100%)
b0897	Replace Suffolk 115 kV breaker T202		Dominion (100%)
b0898	Replace Peninsula 115 kV breaker SC202		Dominion (100%)
b0921	Reconductor Brambleton - Cochran Mill 230 kV line with 201 Yukon conductor		Dominion (100%)
b0923	Install 50-100 MVAR variable reactor banks at Carson 230 kV		Dominion (100%)
b0924	Install 50-100 MVAR variable reactor banks at Dooms 230 kV		Dominion (100%)
b0925	Install 50-100 MVAR variable reactor banks at Garrisonville 230 kV		Dominion (100%)
b0926	Install 50-100 MVAR variable reactor banks at Hamilton 230 kV		Dominion (100%)
b0927	Install 50-100 MVAR variable reactor banks at Yadkin 230 kV		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0928	Install 50-100 MVAR variable reactor banks at Carolina, Doods, Everetts, Idylwood, N. Alexandria, N. Anna, Suffolk and Valley 230 kV substations	Dominion (100%)
b1056	Build a 2nd Shawboro – Elizabeth City 230kV line	Dominion (100%)
b1058	Add a third 230/115 kV transformer at Suffolk substation	Dominion (100%)
b1058.1	Replace Suffolk 115 kV breaker 'T122' with a 40 kA breaker	Dominion (100%)
b1058.2	Convert Suffolk 115 kV straight bus to a ring bus for the three 230/115 kV transformers and three 115 kV lines	Dominion (100%)
b1071	Rebuild the existing 115 kV corridor between Landstown - Va Beach Substation for a double circuit arrangement (230 kV & 115 kV)	Dominion (100%)
b1076	Replace existing North Anna 500-230kV transformer with larger unit	Dominion (100%)
b1087	Replace Cannon Branch 230-115 kV with larger transformer	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1088	Build new Radnor Heights Sub, add new underground circuit from Ballston - Radnor Heights, Tap the Glebe - Davis line and create circuits from Davis - Radnor Heights and Glebe - Radnor Heights		Dominion (100%)
b1089	Install 2nd Burke to Sideburn 230 kV underground cable		Dominion (100%)
b1090	Install a 150 MVAR 230 kV capacitor and one 230 kV breaker at Northwest		Dominion (100%)
b1095	Reconductor Chase City 115 kV bus and add a new tie breaker		Dominion (100%)
b1096	Construct 10 mile double ckt. 230kV tower line from Loudoun to Middleburg		Dominion (100%)
b1102	Replace Bremo 115 kV breaker '9122'		Dominion (100%)
b1103	Replace Bremo 115 kV breaker '822'		Dominion (100%)
b1172	Build a 4-6 mile long 230 kV line from Hopewell to Bull Hill (Ft Lee) and install a 230-115 kV Tx		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1188	Build new Brambleton 500 kV three breaker ring bus connected to the Loudoun to Pleasant View 500 kV line	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1188.1	Replace Loudoun 230 kV breaker '200852' with a 63 kA breaker	Dominion (100%)
b1188.2	Replace Loudoun 230 kV breaker '2008T2094' with a 63 kA breaker	Dominion (100%)
b1188.3	Replace Loudoun 230 kV breaker '204552' with a 63 kA breaker	Dominion (100%)
b1188.4	Replace Loudoun 230 kV breaker '209452' with a 63 kA breaker	Dominion (100%)
b1188.5	Replace Loudoun 230 kV breaker 'WT2045' with a 63 kA breaker	Dominion (100%)
b1188.6	Install one 500/230 kV transformer and two 230 kV breakers at Brambleton	AEC (0.22%) / BGE (7.90%) / DPL (0.59%) / Dominion (75.58%) / ME (0.22%) / PECO (0.73%) / PEPCO (14.76%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1224	Install 2nd Clover 500/230 kV transformer and a 150 MVar capacitor		BGE (7.56%) / DPL (1.03%) / Dominion (78.21%) / ME (0.77%) / PECO (1.39%) / PEPCO (11.04%)
b1225	Replace Yorktown 115 kV breaker 'L982-1'		Dominion (100%)
b1226	Replace Yorktown 115 kV breaker 'L982-2'		Dominion (100%)
b1279	Line #69 Uprate – Increase rating on Locks – Purdy 115 kV to serve additional load at the Reams delivery point		Dominion (100%)
b1306	Reconfigure 115 kV bus at Endless Caverns substation such that the existing two 230/115 kV transformers at Endless Caverns operate in		Dominion (100%)
b1307	Install a 2nd 230/115 kV transformer at Northern Neck Substation		Dominion (100%)
b1308	Improve LSE's power factor in zone to .973 PF, adjust LTC's at Gordonsville and Remington, move existing shunt capacitor banks		Dominion (100%)
b1309	Install a 230 kV line from Lakeside to Northwest utilizing the idle line and 60 line ROW's and reconductor the existing 221 line between Elmont and Northwest		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1310 Install a 115 kV breaker at Broadnax substation on the South Hill side of Broadnax		Dominion (100%)
b1311 Install a 230 kV 3000 amp breaker at Cranes Corner substation to sectionalize the 2104 line into two lines		Dominion (100%)
b1312 Loop the 2054 line in and out of Hollymeade and place a 230 kV breaker at Hollymeade. This creates two lines: Charlottesville - Hollymeade		Dominion (100%)
b1313 Resag wire to 125C from Chesterfield – Shockoe and replace line switch 1799 with 1200 amp switch. The new rating would be 231 MVA.		Dominion (100%)
b1314 Rebuild the 6.8 mile line #100 from Chesterfield to Harrowgate 115 kV for a minimum 300 MBA rating		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1315	Convert line #64 Trowbridge to Winfall to 230 kV and install a 230 kV capacitor bank at Winfall		Dominion (100%)
b1316	Rebuild 10.7 miles of 115 kV line #80, Battleboro – Heartsease DP		Dominion (100%)
b1317	LSE load power factor on the #47 line will need to meet MOA requirements of .973 in 2015 to further resolve this issue through at least 2019		Dominion (100%)
b1318	Install a 115 kV bus tie breaker at Acca substation between the Line #60 and Line #95 breakers		Dominion (100%)
b1319	Resag line #222 to 150 C and upgrade any associated equipment to a 2000A rating to achieve a 706 MVA summer line rating		Dominion (100%)
b1320	Install a 230 kV, 150 MVAR capacitor bank at Southwest substation		Dominion (100%)
b1321	Build a new 230 kV line North Anna – Oak Green and install a 224 MVA 230/115 kV transformer at Oak Green		BGE (0.85%) / Dominion (97.96%) / PEPCO (1.19%)
b1322	Rebuild the 39 Line (Dooms – Sherwood) and the 91 Line (Sherwood – Bremono)		Dominion (100%)
b1323	Install a 224 MVA 230/115 kV transformer at Staunton. Rebuild the 115 kV line #43 section Staunton - Verona		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1324	Install a 115 kV capacitor bank at Oak Ridge. Install a capacitor bank at New Bohemia. Upgrade 230/34.5 kV transformer #3 at Kings Fork	Dominion (100%)
b1325	Rebuild 15 miles of line #2020 Winfall – Elizabeth City with a minimum 900 MVA rating	Dominion (100%)
b1326	Install a third 168 MVA 230/115 kV transformer at Kitty Hawk with a normally open 230 kV breaker and a low side 115 kV breaker	Dominion (100%)
b1327	Rebuild the 20 mile section of line #22 between Kerr Dam – Eatons Ferry substations	Dominion (100%)
b1328	Upgrade the 3.63 mile line section between Possum and Dumfries substations, replace the 1600 amp wave trap at Possum Point	AEC (0.66%) / APS (3.59%) / DPL (0.91%) / Dominion (92.94%) / PECO (1.90%)
b1329	Install line-tie breakers at Sterling Park substation and BECO substation	Dominion (100%)
b1330	Install a five breaker ring bus at the expanded Dulles substation to accommodate the existing Dulles Arrangement and support the Metrorail	Dominion (100%)
b1331	Build a 230 kV line from Shawboro to Aydlett tap and connect Aydlett to the new line	Dominion (100%)
b1332	Build Cannon Branch to Nokesville 230 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1333 Advance n1728 (Replace Possum Point 230 kV breaker H9T237 with an 80 kA breaker)		Dominion (100%)
b1334 Advance n1748 (Replace Ox 230 kV breaker 22042 with a 63 kA breaker)		Dominion (100%)
b1335 Advance n1749 (Replace Ox 230 kV breaker 220T2603 with a 63 kA breaker)		Dominion (100%)
b1336 Advance n1750 (Replace Ox 230 kV breaker 24842 with a 63 kA breaker)		Dominion (100%)
b1337 Advance n1751 (Replace Ox 230 kV breaker 248T2013 with a 63 kA breaker)		Dominion (100%)
b1503.1 Loop Line #2095 in and out of Waxpool approximately 1.5 miles		Dominion (100%)
b1503.2 Construct a new 230kV line from Brambleton to BECO Substation of approximately 11 miles with approximately 10 miles utilizing the vacant side of existing Line #2095 structures		Dominion (100%)
b1503.3 Install a one 230 kV breaker, Future 230 kV ring-bus at Waxpool Substation		Dominion (100%)
b1503.4 The new Brambleton - BECO line will feed Shellhorn Substation load and Greenway TX's #2&3 load		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1506.1	At Gainesville Substation, create two 115 kV straight-buses with a normally open tie-breaker	Dominion (100%)
b1506.2	Upgrade Line 124 (radial from Loudoun) to a minimum continuous rating of 500 MVA and network it into the 115 kV bus feeding NOVEC's DP at Gainesville	Dominion (100%)
b1506.3	Install two additional 230 kV breakers in the ring at Gainesville (may require substation expansion) to accommodate conversion of NOVEC's Gainesville to Wheeler line	Dominion (100%)
b1506.4	Convert NOVEC's Gainesville-Wheeler line from 115 kV to 230 kV (will require Gainesville DP Upgrade replacement of three transformers total at Atlantic and Wheeler Substations)	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1507	Rebuild Mt Storm – Doubs 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)</u></p>
b1508.1	Build a 2nd 230 kV Line Harrisonburg to Endless Caverns	APS (37.05%) / Dominion (62.95%)
b1508.2	Install a 3rd 230-115 kV Tx at Endless Caverns	APS (37.05%) / Dominion (62.95%)
b1508.3	Upgrade a 115 kV shunt capacitor banks at Merck and Edinburg	APS (37.05%) / Dominion (62.95%)
b1536	Advance n1752 (Replace OX 230 breaker 24342 with an (63kA breaker)	Dominion (100%)
b1537	Advance n1753 (Replace OX 230 breaker 243T2097 with an 63kA breaker)	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1538	Replace Loudoun 230 kV breaker '29552'	Dominion (100%)
b1571	Replace Acca 115 kV breaker '6072' with 40 kA	Dominion (100%)
b1647	Upgrade the name plate rating at Morrisville 500kV breaker 'H1T573' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DEFA Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1648	Upgrade name plate rating at Morrisville 500kV breaker 'H2T545' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DEFA Allocation:</u></b>  <u>Dominion (100%)</u></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1649	Replace Morrisville 500kV breaker 'H1T580' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1650	Replace Morrisville 500kV breaker 'H2T569' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1651	Replace Loudoun 230kV breaker '295T2030' with 63kA breaker	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1652	Replace Ox 230kV breaker '209742' with 63kA breaker	Dominion (100%)
b1653	Replace Clifton 230kV breaker '26582' with 63kA breaker	Dominion (100%)
b1654	Replace Clifton 230kV breaker '26682' with 63kA breaker	Dominion (100%)
b1655	Replace Clifton 230kV breaker '205182' with 63kA breaker	Dominion (100%)
b1656	Replace Clifton 230kV breaker '265T266' with 63kA breaker	Dominion (100%)
b1657	Replace Clifton 230kV breaker '2051T2063' with 63kA breaker	Dominion (100%)
b1694	Rebuild Loudoun - Brambleton 500 kV Rebuild Loudoun - Brambleton 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>APS (14.19%) / BGE (12.70%) / Dominion (58.79%) / PEPCO (14.32%)</u>
b1696	Install a breaker and a half scheme with a minimum of eight 230 kV breakers for five existing lines at Idylwood 230 kV	AEC (0.46%) / APS (4.18%) / BGE (2.02%) / DPL (0.80%) / Dominion (88.45%) / JCPL (0.64%) / ME (0.50%) / NEPTUNE* (0.06%) / PECO (1.55%) / PEPCO (1.34%)



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1697	Build a 2nd Clark - Idylwood 230 kV line and install 230 kV gas-hybrid breakers at Clark	AEC (1.35%) / APS (15.65%) / BGE (10.53%) / DPL (2.59%) / Dominion (46.97%) / JCPL (2.36%) / ME (1.91%) / NEPTUNE* (0.23%) / PECO (4.48%) / PEPCO (11.23%) / PSEG (2.59%) / RE (0.11%)
b1698	Install a 2nd 500/230 kV transformer at Brambleton	APS (4.21%) / BGE (13.28%) / DPL (1.09%) / Dominion (59.38%) / PEPCO (22.04%)
b1698.1	Install a 500 kV breaker at Brambleton	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (100%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1698.6	Replace Brambleton 230 kV breaker '2094T2095'	Dominion (100%)
b1699	Reconfigure Line #203 to feed Edwards Ferry sub radial from Pleasant View 230 kV and install new breaker bay at Pleasant View Sub	Dominion (100%)
b1700	Install a 230/115 kV transformer at the new Liberty substation to relieve Gainesville Transformer #3	Dominion (100%)
b1701	Reconductor line #2104 (Fredericksburg - Cranes Corner 230 kV)	APS (8.66%) / BGE (10.95%) / Dominion (63.30%) / PEPCO (17.09%)
b1724	Install a 2nd 138/115 kV transformer at Edinburg	Dominion (100%)
b1728	Replace the 115/34.5 kV transformer #1 at Hickory with a 230/34.5 kV transformer	Dominion (100%)
b1729	Add 4 breaker ring bus at Burton 115 kV substation and construct a 115 kV line approximately 3.5 miles from Oakwood 115 kV substation to Burton 115 kV substation	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1730	Install a 230/115 kV transformer at a new Liberty substation	Dominion (100%)
b1731	Uprate or rebuild Four Rivers – Kings Dominion 115 kV line or Install capacitors or convert load from 115 kV system to 230 kV system	Dominion (100%)
b1790	Split Wharton 115 kV capacitor bank into two smaller units and add additional reactive support in area by correcting power factor at Pantego 115 kV DP and FivePoints 115 kV DP to minimum of 0.973	Dominion (100%)
b1791	Wreck and rebuild 2.1 mile section of Line #11 section between Gordonsville and Somerset	APS (5.83%) / BGE (6.25%) / Dominion (78.38%) / PEPCO (9.54%)
b1792	Rebuild line #33 Halifax to Chase City, 26 miles. Install 230 kV 4 breaker ring bus	Dominion (100%)
b1793	Wreck and rebuild remaining section of Line #22, 19.5 miles and replace two pole H frame construction built in 1930	Dominion (100%)
b1794	Split 230 kV Line #2056 (Hornertown - Rocky Mount) and double tap line to Battleboro Substation. Expand station, install a 230 kV 3 breaker ring bus and install a 230/115 kV transformer	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1795	Reconductor segment of Line #54 (Carolina to Woodland 115 kV) to a minimum of 300 MVA	Dominion (100%)
b1796	Install 115 kV 25 MVAR capacitor bank at Kitty Hawk Substation	Dominion (100%)
b1797	Wreck and rebuild 7 miles of the Dominion owned section of Cloverdale - Lexington 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (0.86%) / APS (41.66%) / ATSI (0.40%) / BGE (20.89%) / Dayton (0.14%) / DEOK (0.44%) / Dominion (0.95%) / EKPC (0.13%) / PEPCO (34.53%)</u>
b1798	Build a 450 MVAR SVC and 300 MVAR switched shunt at Loudoun 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (88.62%) / PEPCO (11.38%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1799	Build 150 MVAR Switched Shunt at Pleasant View 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (3.37%) / Dominion (95.01%) / ME (0.54%) / PEPCO (1.08%)</u></p>
b1805	Install a 250 MVAR SVC at the existing Mt. Storm 500kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (62.13%) / PEPCO (37.87%)</u></p>
b1809	Replace Brambleton 230 kV Breaker '22702'	Dominion (100%)
b1810	Replace Brambleton 230 kV Breaker '227T2094'	Dominion (100%)

\* Neptune Regional Transmission System, LLC

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.1	Surry to Skiffes Creek 500 kV Line (7 miles overhead)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1905.2	Surry 500 kV Station Work	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1905.3	Skiffes Creek 500-230 kV Tx and Switching Station	Dominion (99.84%) / PEPCO (0.16%)
b1905.4	New Skiffes Creek - Whealton 230 kV line	Dominion (99.84%) / PEPCO (0.16%)
b1905.5	Whealton 230 kV breakers	Dominion (99.84%) / PEPCO (0.16%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.6	Yorktown 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.7	Lanexa 115 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.8	Surry 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.9	Kings Mill, Peninmen, Toano, Waller, Warwick	Dominion (99.84%) / PEPCO (0.16%)
b1906.1	At Yadkin 500 kV, install six 500 kV breakers	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b><u>DFAX Allocation:</u></b> <b><u>Dominion (100%)</u></b>
b1906.2	Install a 2nd 230/115 kV TX at Yadkin	Dominion (100%)
b1906.3	Install a 2nd 230/115 kV TX at Chesapeake	Dominion (100%)
b1906.4	Uprate Yadkin – Chesapeake 115 kV	Dominion (100%)
b1906.5	Install a third 500/230 kV TX at Yadkin	Dominion (100%)
b1907	Install a 3rd 500/230 kV TX at Clover	APS (5.83%) / BGE (4.74%) / Dominion (81.79%) / PEPCO (7.64%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1908	Rebuild Lexington – Dooms 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>DEOK (1.12%) / Dominion (85.91%) / EKPC (0.33%) / PEPCO (12.64%)</u></p>
b1909	Uprate Brema – Midlothian 230 kV to its maximum operating temperature	APS (6.31%) / BGE (3.81%) / Dominion (81.90%) / PEPCO (7.98%)
b1910	Build a Suffolk – Yadkin 230 kV line (14 miles) and install 4 breakers	Dominion (100%)
b1911	Add a second Valley 500/230 kV TX	APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)
b1912	Install a 500 MVAR SVC at Landstown 230 kV	DEOK (0.46%) / Dominion (99.54%)
b2053	Rebuild 28 mile line	AEP (100%)
b2125	Install four additional 230 kV 100 MVAR variable shunt reactor banks at Clifton, Gallows Road, Garrisonville, and Virginia Hills substations	Dominion (100%)
b2126	Install two additional 230 kV 100 MVAR variable shunt reactor banks at Churchland and Shawboro substations	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2181	Add a motor to an existing switch at Prince George to allow for Sectionalizing scheme for line #2124 and allow for Brickhouse DP to be re-energized from the 115 kV source	Dominion (100%)
b2182	Install 230kV 4-breaker ring at Enterprise 230 kV to isolate load from transmission system when substation initially built	Dominion (100%)
b2183	Add a motor to an existing switch at Keene Mill to allow for a sectionalizing scheme	Dominion (100%)
b2184	Install a 230 kV breaker at Tarboro to split line #229. Each will feed an autotransformer at Tarboro. Install switches on each autotransformer	Dominion (100%)
b2185	Uprate Line #69 segment Reams DP to Purdy (19 miles) from 41 MVA to 162 MVA by replacing 5 structures and re-sagging the line from 50C to 75C	Dominion (100%)
b2186	Install a 2nd 230-115kV transformer at Earleys connected to the existing 115kV and 230kV ring busses. Add a 115 kV breaker and 230kV breaker to the ring busses	Dominion (100%)
b2187	Install 4 - 230kV breakers at Shellhorn 230 kV to isolate load	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

Schedule 12 – Appendix  
Versions effective January 1, 2018 - 2018 Annual Update  
(Marked Format)

## SCHEDULE 12 – APPENDIX

### (1) Atlantic City Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0135	Build new Cumberland – Dennis 230 kV circuit which replaces existing Cumberland – Corson 138 kV	AEC (100%)
b0136	Install Dennis 230/138 kV transformer, Dennis 150 MVAR SVC and 50 MVAR capacitor	AEC (100%)
b0137	Build new Dennis – Corson 138 kV circuit	AEC (100%)
b0138	Install Cardiff 230/138 kV transformer and a 50 MVAR capacitor at Cardiff	AEC (100%)
b0139	Build new Cardiff – Lewis 138 kV circuit	AEC (100%)
b0140	Reconductor Laurel – Woodstown 69 kV	AEC (100%)
b0141	Reconductor Monroe – North Central 69 kV	AEC (100%)
b0265	Upgrade AE portion of Delco Tap – Mickleton 230 kV circuit	AEC (89.87%) / JCPL (9.48%) / Neptune* (0.65%)
b0276	Replace both Monroe 230/69 kV transformers	AEC (91.46%) / PSEG (8.31%) / RE (0.23%)
b0276.1	Upgrade a strand bus at Monroe to increase the rating of transformer #2	AEC (100%)
b0277	Install a second Cumberland 230/138 kV transformer	AEC (100%)
b0281.1	Install 35 MVAR capacitor at Lake Ave 69 kV substation	AEC (100%)

## Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0281.2	Install 15 MVAR capacitor at Shipbottom 69 kV substation	AEC (100%)
b0281.3	Install 8 MVAR capacitors on the AE distribution system	AEC (100%)
b0142	Reconductor Landis – Minotola 138 kV	AEC (100%)
b0143	Reconductor Beckett – Paulsboro 69 kV	AEC (100%)
b0210	Install a new 500/230kV substation in AEC area. The high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (63.29%) / JCPL (36.71%)</u>
b0210.1	Orchard – Cumberland – Install second 230 kV line	AEC (65.23%) / JCPL (25.87%) / Neptune * (2.55%) / PSEG (6.35%)††
b0210.2	Install a new 500/230kV substation in AEC area, the high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)††

\* Neptune Regional Transmission System, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

### Atlantic City Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0211	Reconductor Union - Corson 138kV circuit		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0212	Substation upgrades at Union and Corson 138kV		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0214	Install 50 MVAR capacitor at Cardiff 230kV substation		AEC (100%)
b0431	Monroe Upgrade New Freedom strand bus		AEC (100%)
b0576	Move the Monroe 230/69 kV to Mickleton		AEC (100%)
b0744	Upgrade a strand bus at Mill 138 kV		AEC (100%)
b0871	Install 35 MVAR capacitor at Motts Farm 69 kV		AEC (100%)
b1072	Modify the existing EMS load shedding scheme at Cedar to additionally sense the loss of both Cedar 230/69 kV transformers and shed load accordingly		AEC (100%)
b1127	Build a new Lincoln-Minitola 138 kV line		AEC (100%)
b1195.1	Upgrade the Corson sub T2 terminal		AEC (100%)
b1195.2	Upgrade the Corson sub T1 terminal		AEC (100%)

### Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1244	Install 10 MVAR capacitor at Peermont 69 kV substation	AEC (100%)
b1245	Rebuild the Newport-South Millville 69 kV line	AEC (100%)
b1250	Reconductor the Monroe – Glassboro 69 kV	AEC (100%)
b1250.1	Upgrade substation equipment at Glassboro	AEC (100%)
b1280	Sherman: Upgrade 138/69 kV transformers	AEC (100%)
b1396	Replace Lewis 138 kV breaker ‘L’	AEC (100%)
b1398.5	Reconductor the existing Mickleton – Goucestr 230 kV circuit (AE portion)	JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1598	Reconductor Sherman Av – Carl’s Corner 69kV circuit	AEC (100%)
b1599	Replace terminal equipments at Central North 69 kV substation	AEC (100%)
b1600	Upgrade the Mill T2 138/69 kV transformer	AEC (89.21%) / JCPL (4.76%) / PSEG (5.80%) / RE (0.23%)
b2157	Re-build 5.3 miles of the Corson - Tuckahoe 69 kV circuit	AEC (100%)

\* Neptune Regional Transmission System, LLC

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

## SCHEDULE 12 – APPENDIX

### (3) Delmarva Power & Light Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0144.1	Build new Red Lion – Milford – Indian River 230 kV circuit	DPL (100%)
b0144.2	Indian River Sub – 230 kV Terminal Position	DPL (100%)
b0144.3	Red Lion Sub – 230 kV Terminal Position	DPL (100%)
b0144.4	Milford Sub – (2) 230 kV Terminal Positions	DPL (100%)
b0144.5	Indian River – 138 kV Transmission Line to AT-20	DPL (100%)
b0144.6	Indian River – 138 & 69 kV Transmission Ckts. Undergrounding	DPL (100%)
b0144.7	Indian River – (2) 230 kV bus ties	DPL (100%)
b0148	Re-rate Glasgow – Mt. Pleasant 138 kV and North Seaford – South Harrington 138 kV	DPL (100%)
b0149	Complete structure work to increase rating of Cheswold – Jones REA 138 kV	DPL (100%)
b0221	Replace disconnect switch on Edgewood-N. Salisbury 69 kV	DPL (100%)
b0241.1	Keeny Sub – Replace overstressed breakers	DPL (100%)
b0241.2	Edgemoor Sub – Replace overstressed breakers	DPL (100%)
b0241.3	Red Lion Sub – Substation reconfigure to provide for second Red Lion 500/230 kV transformer	DPL (84.5%) / PECO (15.5%)
b0261	Replace 1200 Amp disconnect switch on the Red Lion – Reybold 138 kV circuit	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0262	Reconductor 0.5 miles of Christiana – Edgemoor 138 kV	DPL (100%)
b0263	Replace 1200 Amp wavetrap at Indian River on the Indian River – Frankford 138 kV line	DPL (100%)
b0272.1	Replace line trap and disconnect switch at Keeney 500 kV substation – 5025 Line Terminal Upgrade	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (27.55%) / BGE (0.25%) / DPL (44.42%) / PECO (27.29%) / PEPCO (0.24%) / PPL (0.25%)</p>
b0282	Install 46 MVAR capacitors on the DPL distribution system	DPL (100%)
b0291	Replace 1600A disconnect switch at Harmony 230 kV and for the Harmony – Edgemoor 230 kV circuit, increase the operating temperature of the conductor	DPL (100%)
b0295	Raise conductor temperature of North Seaford – Pine Street – Dupont Seaford	DPL (100%)

\*Neptune Regional Transmission System, LLC



## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0296	Rehoboth/Cedar Neck Tap (6733-2) upgrade		DPL (100%)
b0320	Create a new 230 kV station that splits the 2 <sup>nd</sup> Milford to Indian River 230 kV line, add a 230/69 kV transformer, and run a new 69 kV line down to Harbeson 69 kV		DPL (100%)
b0382	Cambridge Sub – Close through to Todd Substation		DPL (100%)
b0383	Wye Mills AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0384	Replace Indian River AT-20 (400 MVA)		DPL (100%)
b0385	Oak Hall to New Church (13765) Upgrade		DPL (100%)
b0386	Cheswold/Kent (6768) Rebuild		DPL (100%)
b0387	N. Seaford – Add a 2 <sup>nd</sup> 138/69 kV autotransformer		DPL (100%)
b0388	Hallwood/Parksley (6790-2) Upgrade		DPL (100%)
b0389	Indian River AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0390	Rehoboth/Lewes (6751-1 and 6751-2) Upgrade		DPL (100%)
b0391	Kent/New Meredith (6704-2) Upgrade		DPL (100%)
b0392	East New Market Sub – Establish a 69 kV Bus Arrangement		DPL (100%)
b0415	Increase the temperature ratings of the Edgemoor – Christiana – New Castle 138 kV by replacing six transmission poles		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0437	Spare Keeney 500/230 kV transformer		DPL (100%)
b0441	Additional spare Keeney 500/230 kV transformer		DPL (100%)
b0480	Rebuild Lank – Five Points 69 kV		DPL (100%)
b0481	Replace wave trap at Indian River 138 kV on the Omar – Indian River 138 kV circuit		DPL (100%)
b0482	Rebuild Millsboro – Zoar REA 69 kV		DPL (100%)
b0483	Replace Church 138/69 kV transformer and add two breakers		DPL (100%)
b0483.1	Build Oak Hall – Wattsville 138 kV line		DPL (100%)
b0483.2	Add 138/69 kV transformer at Wattsville		DPL (100%)
b0483.3	Establish 138 kV bus position at Oak Hall		DPL (100%)
b0484	Re-tension Worcester – Berlin 69 kV for 125°C		DPL (100%)
b0485	Re-tension Taylor – North Seaford 69 kV for 125°C		DPL (100%)
b0494.1	Install a 2 <sup>nd</sup> Red Lion 230/138 kV		DPL (100%)
b0494.2	Hares Corner – Relay Improvement		DPL (100%)
b0494.3	Reybold – Relay Improvement		DPL (100%)
b0494.4	New Castle – Relay Improvement		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u></p>
b0513	Rebuild the Ocean Bay – Maridel 69 kV line	DPL (100%)
b0527	Replace existing 12 MVAR capacitor at Bethany with a 30 MVAR capacitor	DPL (100%)
b0528	Replace existing 69/12 kV transformer at Bethany with a 138/12 kV transformer	DPL (100%)
b0529	Install an additional 8.4 MVAR capacitor at Grasonville 69 Kv	DPL (100%)
b0530	Replace existing 12 MVAR capacitor at Wye Mills with a 30 MVAR capacitor	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0531	Create a four breaker 138 kV ring bus at Wye Mills and add a second 138/69 kV transformer		DPL (100%)
b0566	Rebuild the Trappe Tap – Todd 69 kV line		DPL (100%)
b0567	Rebuild the Mt. Pleasant – Townsend 138 kV line		DPL (100%)
b0568	Install a third Indian River 230/138 kV transformer		DPL (100%)
b0725	Add a third Steele 230/138 kV transformer		DPL (100%)
b0732	Rebuild Vaugh – Wells 69 kV		DPL (100%)
b0733	Add a second 230/138 kV transformer at Harmony		DPL (97.06%) / PECO (2.94%)
b0734	Rebuild Church – Steele 138 kV		DPL (100%)
b0735	Rebuild Indian River – Omar – Bethany 138 kV		DPL (100%)
b0736	Rebuild Dupont Edgemoor – Edgemoor – Silverside 69 kV		DPL (69.65%) / PECO (17.30%) / PSEG (12.56%) / RE (0.49%)
b0737	Build a new Indian River – Bishop 138 kV line		DPL (100%)
b0750	Convert 138 kV network path from Vienna – Loretto – Piney - Grove to 230 kV, add 230/138 kV transformer to Loretto 230 kV		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0751	Add two additional breakers at Keeney 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>DPL (100%)</u></p>
b0752	Replace two circuit breakers to bring the emergency rating up to 348 MVA	DPL (100%)
b0753	Add a second Loretto 230/138 kV transformer	DPL (100%)
b0754	Rebuild 10 miles of Glasgow to Mt. Pleasant 138 kV line to bring the normal rating to 298 MVA and the emergency rating to 333 MVA	DPL (100%)
b0792	Reconfigure Cecil Sub into 230 and 138 kV ring buses, add a 230/138 kV transformer, and operate the 34.5 kV bus normally open	DPL (100%)
b0873	Build 2nd Glasgow-Mt Pleasant 138 kV line	DPL (100%)
b0874	Reconfigure Brandywine substation	DPL (100%)

\*Neptune Regional Transmission System, LLC

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0876	Install 50 MVAR SVC at 138th St 138 kV	DPL (100%)
b0877	Build a 2nd Vienna-Steele 230 kV line	DPL (100%)
b0879.1	Apply a special protection scheme (load drop at Stevensville and Grasonville)	DPL (100%)
b1246	Re-build the Townsend – Church 138 kV circuit	DPL (100%)
b1247	Re-build the Glasgow – Cecil 138 kV circuit	DPL (72.06%) / PECO (27.94%)
b1248	Install two 15 MVAR capacitor at Loretto 69 kV	DPL (100%)
b1249	Reconfigure the existing Sussex 69 kV capacitor	DPL (100%)
b1603	Upgrade 19 miles conductor of the Wattsville - Signepost - Stockton - Kenney 69 kV circuit	DPL (100%)
b1604	Replace CT at Reybold 138 kV substation	DPL (100%)
b1723	Replace strand bus and disconnect switch at Glasgow 138 kV substation	DPL (100%)
b1899.1	Install new variable reactors at Indian River and Nelson 138 kV	DPL (100%)

\* Neptune Regional Transmission System, LLC

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-3.

**Delmarva Power & Light Company (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1899.2	Install new variable reactors at Cedar Creek 230 kV		DPL (100%)
b1899.3	Install new variable reactors at New Castle 138 kV and Easton 69 kV		DPL (100%)

## SCHEDULE 12 – APPENDIX

### (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0215	Install 230Kv series reactor and 2- 100MVAR PLC switched capacitors at Hunterstown		AEC (6.75%) / APS (4.00%) / DPL (9.16%) / JCPL (16.96%) / ME (10.60%) / Neptune* (1.70%) / PECO (19.12%) / PPL (8.55%) / PSEG (22.82%) / RE (0.34%)
b0404.1	Replace South Reading 230 kV breaker 107252		ME (100%)
b0404.2	Replace South Reading 230 kV breaker 100652		ME (100%)
b0575.1	Rebuild Hunterstown – Texas Eastern Tap 115 kV		ME (100%)
b0575.2	Rebuild Texas Eastern Tap – Gardners 115 kV and associated upgrades at Gardners including disconnect switches		ME (100%)
b0650	Reconductor Jackson – JE Baker – Taxville 115 kV line		ME (100%)
b0652	Install bus tie circuit breaker on Yorkana 115 kV bus and expand the Yorkana 230 kV ring bus by one breaker so that the Yorkana 230/115 kV banks 1, 3, and 4 cannot be lost for either B-14 breaker fault or a 230 kV line or bank fault with a stuck breaker		ME (100%)

\* Neptune Regional Transmission System, LLC



**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0653 Construct a 230 kV Bernville station by tapping the North Temple – North Lebanon 230 kV line. Install a 230/69 kV transformer at existing Bernville 69 kV station		ME (100%)
b1000 Replace Portland 115kV breaker '95312'		ME (100%)
b1001 Replace Portland 115kV breaker '92712'		ME (100%)
b1002 Replace Hunterstown 115 kV breaker '96392'		ME (100%)
b1003 Replace Hunterstown 115 kV breaker '96292'		ME (100%)
b1004 Replace Hunterstown 115 kV breaker '99192'		ME (100%)
b1061 Replace existing Yorkana 230/115 kV transformer banks 1 and 4 with a single, larger transformer similar to transformer bank #3		ME (100%)
b1061.1 Replace the Yorkana 115 kV breaker '97282'		ME (100%)
b1061.2 Replace the Yorkana 115 kV breaker 'B282'		ME (100%)
b1302 Replace the limiting bus conductor and wave trap at the Jackson 115 kV terminal of the Jackson – JE Baker Tap 115 kV line		ME (100%)
b1365 Reconductor the Middletown – Collins 115 kV (975) line 0.32 miles of 336 ACSR		ME (100%)

\* Neptune Regional Transmission System, LLC

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements   Annual Revenue Requirement   Responsible Customer(s)

b1366	Reconductor the Collins – Cly – Newberry 115 kV (975) line 5 miles with 795 ACSR		ME (100%)
b1727	Reconductor 2.4 miles of existing 556 and 795 ACSR from Harley Davidson to Pleasureville 115 kV with 795 ACSS to raise the ratings		ME (100%)
b1800	Install a 500 MVAR SVC at the existing Hunterstown 500kV substation		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (0.01%) / DPL (55.56%) / ME (44.42%) / PSEG (0.01%)</u></p>
b1801	Build a 250 MVAR SVC at Altoona 230 kV		AEC (6.48%) / AEP (2.58%) / APS (6.89%) / BGE (6.58%) / DPL (12.40%) / Dominion (14.90%) / JCPL (8.15%) / ME (6.21%) / Neptune* (0.82%) / PECO (21.58%) / PPL (4.89%) / PSEG (8.19%) / RE (0.33%)

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1816.5	Replace SCCIR (Sub-conductor) at Hunterstown Substation on the No. 1, 230/115 kV transformer	ME (100%)
b1999	Replace limiting wave trap, circuit breaker, substation conductor, relay and current transformer components at Northwood	ME (100%)
b2000	Replace limiting wave trap on the Glendon - Hosensack line	ME (100%)
b2001	Replace limiting circuit breaker and substation conductor transformer components at Portland 230kV	ME (100%)
b2002	Northwood 230/115 kV Transformer upgrade	ME (100%)
b2023	Construct a new North Temple - Riverview - Cartech 69 kV line (4.7 miles) with 795 ACSR	ME (100%)
b2024	Upgrade 4/0 substation conductors at Middletown 69 kV	ME (100%)
b2025	Upgrade 4/0 and 350 Cu substation conductors at the Middletown Junction terminal of the Middletown Junction - Wood Street Tap 69 kV line	ME (100%)
b2026	Upgrade an OC protection relay at the Baldy 69 kV substation	ME (100%)
b2148	Install a 115 kV 28.8 MVAR capacitor at Pleasureville substation	ME (100%)

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2149 Upgrade substation riser on the Smith St. - York Inc. 115 kV line		ME (100%)
b2150 Upgrade York Haven structure 115 kV bus conductor on Middletown Jct. - Zions View 115 kV		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## SCHEDULE 12 – APPENDIX

### (7) Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.1	Build 500 kV substation in PENELEC – Tap the Keystone – Juniata and Conemaugh – Juniata 500 kV, connect the circuits with a breaker and half scheme, and install new 400 MVAR capacitor	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0284.3	Replace wave trap and upgrade a bus section at Keystone 500 kV – on the Keystone – Airydale 500 kV	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0285.1	Replace wave trap at Keystone 500 kV – on the Keystone – Conemaugh 500 kV	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0285.2	Replace wave trap and relay at Conemaugh 500 kV – on the Conemaugh – Keystone 500 kV	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0349	Upgrade Rolling Meadows-Gore Jct 115 kV	PENELEC (100%)
b0360	Construction of a ring bus on the 345 kV side of Wayne substation	PENELEC (100%)
b0365	Add a 50 MVAR, 230 kV cap bank at Altoona 230 kV	PENELEC (100%)
b0369	Install 100 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0370	Install 500 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0376	Install 300 MVAR capacitor at Conemaugh 500 kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (5.35%) / BGE (19.46%) / DL (0.25%) / JCPL (19.57%) / ME (6.75%) / NEPTUNE (2.17%) / PECO (20.81%) / PSEG (24.65%) / RE (0.99%)</p>
b0442	Spare Keystone 500/230 kV transformer	PENELEC (100%)
b0515	Replace Lewistown circuit breaker 1LY Yeagertown	PENELEC (100%)
b0516	Replace Lewistown circuit breaker 2LY Yeagertown	PENELEC (100%)
b0517	Replace Shawville bus section circuit breaker	PENELEC (100%)
b0518	Replace Homer City circuit breaker 201 Johnstown	PENELEC (100%)

\* Neptune Regional Transmission System, LLC



**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0519	Replace Keystone circuit breaker 4 Transformer - 20	PENELEC (100%)
b0549	Install 250 MVAR capacitor at Keystone 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (5.39%) / BGE (23.28%) / JCPL (17.99%) / ME (7.64%) / NEPTUNE (1.99%) / PECO (20.77%) / PSEG (22.05%) / RE (0.89%)</p>
b0550	Install 25 MVAR capacitor at Lewis Run 115 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0551	Install 25 MVAR capacitor at Saxton 115 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0552	Install 50 MVAR capacitor at Altoona 230 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0553	Install 50 MVAR capacitor at Raystown 230 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0555	Install 100 MVAR capacitor at Johnstown 230 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0556	Install 50 MVAR capacitor at Grover 230 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0557	Install 75 MVAR capacitor at East Towanda 230 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0563	Install 25 MVAR capacitor at Farmers Valley 115 kV substation	PENELEC (100%)
b0564	Install 10 MVAR capacitor at Ridgeway 115 kV substation	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0654	Reconfigure the Cambria Slope 115 kV and Wilmore Junction 115 kV stations to eliminate Wilmore Junction 115 kV 3-terminal line	PENELEC (100%)
b0655	Reconfigure and expand the Glade 230 kV ring bus to eliminate the Glade Tap 230 kV 3-terminal line	PENELEC (100%)
b0656	Add three breakers to form a ring bus at Altoona 230 kV	PENELEC (100%)
b0794	Upgrade the Homer City 230 kV breaker 'Pierce Road'	PENELEC (100%)
b1005	Replace Glory 115 kV breaker '#7 XFMR'	PENELEC (100%)
b1006	Replace Shawville 115 kV breaker 'NO.14 XFMR'	PENELEC (100%)
b1007	Replace Shawville 115 kV breaker 'NO.15 XFMR'	PENELEC (100%)
b1008	Replace Shawville 115 kV breaker '#1B XFMR'	PENELEC (100%)
b1009	Replace Shawville 115 kV breaker '#2B XFMR'	PENELEC (100%)
b1010	Replace Shawville 115 kV breaker 'Dubois'	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1011	Replace Shawville 115 kV breaker 'Philipsburg'	PENELEC (100%)
b1012	Replace Shawville 115 kV breaker 'Garman'	PENELEC (100%)
b1059	Replace a CRS relay at Hooversville 115 kV station	PENELEC (100%)
b1060	Replace a CRS relay at Rachel Hill 115 kV station	PENELEC (100%)
b1153	Upgrade Conemaugh 500/230 kV transformer and add a new line from Conemaugh-Seward 230 kV	AEC (3.86%) / APS (6.45%) / BGE (17.33%) / DL (0.33%) / JCPL (12.95%) / ME (7.10%) / PECO (11.88%) / PEPSCO (0.57%) / PPL (15.89%) / PSEG (21.15%) / RE (0.74%) / NEPTUNE* (1.75%)
b1153.1	Revise the reclosing on the Shelocta 115 kV breaker 'Lucerne'	PENELEC (100%)
b1169	Replace Shawville 115 kV breaker '#1A XFMR'	PENELEC (100%)
b1170	Replace Shawville 115 kV breaker '#2A XFMR'	PENELEC (100%)
b1277	Build a new Osterburg East – Bedford North 115 kV Line, 5.7 miles of 795 ACSR	PENELEC (100%)
b1278	Install 25 MVAR Capacitor Bank at Somerset 115 kV	PENELEC (100%)

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1367	Replace the Cambria Slope 115/46 kV 50 MVA transformer with 75 MVA	PENELEC (100%)
b1368	Replace the Claysburg 115/46 kV 30 MVA transformer with 75 MVA	PENELEC (100%)
b1369	Replace the 4/0 CU substation conductor with 795 ACSR on the Westfall S21 Tap 46 kV line	PENELEC (100%)
b1370	Install a 3rd 115/46 kV transformer at Westfall	PENELEC (100%)
b1371	Reconductor 2.6 miles of the Claysburg – HCR 46 kV line with 636 ACSR	PENELEC (100%)
b1372	Replace 4/0 CU substation conductor with 795 ACSR on the Hollidaysburg – HCR 46 kV	PENELEC (100%)
b1373	Re-configure the Erie West 345 kV substation, add a new circuit breaker and relocate the Ashtabula line exit	PENELEC (100%)
b1374	Replace wave traps at Raritan River and Deep Run 115 kV substations with higher rated equipment for both B2 and C3 circuits	PENELEC (100%)
b1535	Reconductor 0.8 miles of the Gore Junction – ESG Tap 115 kV line with 795 ACSR	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1607	Reconductor the New Baltimore - Bedford North 115 kV	PENELEC (100%)
b1608	Construct a new 345/115 kV substation and loop the Mansfield - Everts 115 kV	APS (8.61%) / PECO (1.72%) / PENELEC (89.67%)
b1609	Construct Four Mile Junction 230/115 kV substation. Loop the Erie South - Erie East 230 kV line, Buffalo Road - Corry East and Buffalo Road - Erie South 115 kV lines	APS (4.86%) / PENELEC (95.14%)
b1610	Install a new 230 kV breaker at Yeagertown	PENELEC (100%)
b1713	Install a 345 kV breaker at Erie West and relocate Ashtabula 345 kV line	PENELEC (100%)
b1769	Install a 75 MVAR cap bank on the Four Mile 230 kV bus	PENELEC (100%)
b1770	Install a 50 MVAR cap bank on the Buffalo Road 115 kV bus	PENELEC (100%)
b1802	Build a 100 MVAR Fast Switched Shunt and 200 MVAR Switched Shunt at Mansfield 345 kV	AEC (6.48%) / AEP (2.58%) / APS (6.89%) / BGE (6.58%) / DPL (12.40%) / Dominion (14.90%) / JCPL (8.15%) / ME (6.21%) / NEPTUNE* (0.82%) / PECO (21.58%) / PPL (4.89%) / PSEG (8.19%) / RE (0.33%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1821	Replace the Erie South 115 kV breaker 'Union City'	PENELEC (100%)
b1943	Construct a 115 kV ring bus at Claysburg Substation. Bedford North and Saxton lines will no longer share a common breaker	PENELEC (100%)
b1944	Reconductor Eclipse substation 115 kV bus with 1033 kcmil conductor	PENELEC (100%)
b1945	Install second 230/115 kV autotransformer at Johnstown	PENELEC (100%)
b1966	Replace the 1200 Amp Line trap at Lewistown on the Raystown-Lewistown 230 kV line and replace substation conductor at Lewistown	PENELEC (100%)
b1967	Replace the Blairsville 138/115 kV transformer	PENELEC (100%)
b1990	Install a 25 MVAR 115 kV Capacitor at Grandview	PENELEC (100%)
b1991	Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the Homer City-Stolle Road 345 kV line into Farmers Valley	PENELEC (100%)
b1992	Reconductor Cambria Slope-Summit 115kV with 795 ACSS Conductor	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1993	Relocate the Erie South 345 kV line terminal	APS (10.19%) / JCPL (5.19%) / Neptune* (0.55%) / PENELEC (71.38%) / PSEG (12.21%) / RE (0.48%)
b1994	Convert Lewis Run-Farmers Valley to 230 kV using 1033.5 ACSR conductor. Project to be completed in conjunction with new Farmers Valley 345/230 kV transformation	APS (33.49%) / JCPL (8.72%) / ME (5.57%) / Neptune (0.87%) / PENELEC (37.14%) / PSEG (13.67%) / RE (0.54%)
b1995	Change CT Ratio at Claysburg	PENELEC (100%)
b1996.1	Replace 600 Amp Disconnect Switches on Ridgeway-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1996.2	Reconductor Ridgeway and Whetstone 115 kV Bus	PENELEC (100%)
b1996.3	Replace Wave Trap at Ridgeway	PENELEC (100%)
b1996.4	Change CT Ratio at Ridgeway	PENELEC (100%)
b1997	Replace 600 Amp Disconnect Switches on Dubois-Harvey Run-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)



**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville		PENELEC (100%)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

\* Neptune Regional Transmission System, LLC

## SCHEDULE 12 – APPENDIX

### (8) PECO Energy Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0171.1	Replace two 500 kV circuit breakers and two wave traps at Elroy substation to increase rating of Elroy - Hosensack 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (6.06%) / DPL (8.20%) / JCPL (21.17%) / PECO (64.56%) / PSEG (0.01%)</u></p>
b0180	Replace Whitpain 230kV circuit breaker #165	PECO (100%)
b0181	Replace Whitpain 230kV circuit breaker #J105	PECO (100%)
b0182	Upgrade Plymouth Meeting 230kV circuit breaker #125	PECO (100%)
b0205	Install three 28.8Mvar capacitors at Planebrook 35kV substation	PECO (100%)
b0206	Install 161Mvar capacitor at Planebrook 230kV substation	AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)

\* Neptune Regional Transmission System, LLC

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0207	Install 161Mvar capacitor at Newlinville 230kV substation	AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)
b0208	Install 161Mvar capacitor Heaton 230kV substation	AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)
b0209	Install 2% series reactor at Chichester substation on the Chichester - Mickleton 230kV circuit	AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0264	Upgrade Chichester – Delco Tap 230 kV and the PECO portion of the Delco Tap – Mickleton 230 kV circuit	AEC (89.87%) / JCPL (9.48%) / Neptune* (0.65%)
b0266	Replace two wave traps and ammeter at Peach Bottom, and two wave traps and ammeter at Newlinville 230 kV substations	PECO (100%)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)†</p> <p><b><u>DFAX Allocation:</u></b>  PECO (100%)</p>

\* Neptune Regional Transmission System, LLC

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.1	Add a new 230 kV circuit between Whitpain and Heaton substations	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.2	Reconductor the Whitpain 1 – Plymtg 1 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.3	Convert the Heaton bus to a ring bus	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.4	Reconductor the Heaton – Warminster 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.5	Reconductor Warminster – Buckingham 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††

\* Neptune Regional Transmission System, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269.6	Add a new 500 kV breaker at Whitpain between #3 transformer and 5029 line	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>PECO (100%)</u></p>
b0269.7	Replace North Wales 230 kV breaker #105	PECO (100%)
b0280.1	Install 161 MVAR capacitor at Warrington 230 kV substation	PECO 100%
b0280.2	Install 161 MVAR capacitor at Bradford 230 kV substation	PECO 100%
b0280.3	Install 28.8 MVAR capacitor at Warrington 34 kV substation	PECO 100%
b0280.4	Install 18 MVAR capacitor at Waverly 13.8 kV substation	PECO 100%

\* Neptune Regional Transmission System, LLC

† Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

†† Cost allocations associated with below 500 kV elements of the project

## PECO Energy Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0287	Install 600 MVAR Dynamic Reactive Device in Whitpain 500 kV vicinity		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (6.06%) / DPL (8.20%) / JCPL (21.17%) / PECO (64.56%) / PSEG (0.01%)</u></p>
b0351	Reconductor Tunnel – Grays Ferry 230 kV		PECO (100%)
b0352	Reconductor Tunnel – Parrish 230 kV		PECO (100%)
b0353.1	Install 2% reactors on both lines from Eddystone – Llanerch 138 kV		PECO (100%)
b0353.2	Install identical second 230/138 kV transformer in parallel with existing 230/138 kV transformer at Plymouth Meeting		PECO 100%
b0353.3	Replace Whitpain 230 kV breaker 135		PECO (100%)
b0353.4	Replace Whitpain 230 kV breaker 145		PECO (100%)
b0354	Eddystone – Island Road Upgrade line terminal equipment		PECO 100%

\* Neptune Regional Transmission System, LLC

†† Cost allocations associated with below 500 kV elements of the project

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0355	Reconductor Master – North Philadelphia 230 kV line	PECO 100%
b0357	Reconductor Buckingham – Pleasant Valley 230 kV	JCPL (37.89%) / Neptune* (4.55%) / PSEG (55.19%) / RE (2.37%)
b0359	Reconductor North Philadelphia – Waneeta 230 kV circuit	PECO 100%
b0402.1	Replace Whitpain 230 kV breaker #245	PECO (100%)
b0402.2	Replace Whitpain 230 kV breaker #255	PECO (100%)
b0438	Spare Whitpain 500/230 kV transformer	PECO (100%)
b0443	Spare Peach Bottom 500/230 kV transformer	PECO (100%)
b0505	Reconductor the North Wales – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) / PECO (83.66%)
b0506	Reconductor the North Wales – Hartman 230 kV circuit	AEC (8.58%) / DPL (7.76%) / PECO (83.66%)
b0507	Reconductor the Jarrett – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) PECO (83.66%)
b0508.1	Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit	PECO (100%)
b0509	Reconductor the Jarrett – Heaton 230 kV circuit	PECO (100%)

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0727	Rebuild Bryn Mawr – Plymouth Meeting 138 kV line	AEC (1.25%) / DPL (3.11%) / PECO (95.64%)
b0789	Reconductor the line to provide a normal rating of 677 MVA and an emergency rating of 827 MVA	AEC (0.73%) / JCPL (17.52%) / NEPTUNE* (1.72%) / PECO (44.88%) / PSEG (33.83%) / RE (1.32%)
b0790	Reconductor the Bradford – Planebrook 230 kV Ckt. 220-31 to provide a normal rating of 677 MVA and emergency rating of 827 MVA	JCPL (17.46%) / NEPTUNE* (1.71%) / PECO (45.51%) / PSEG (34.00%) / RE (1.32%)
b0829.1	Replace Whippain 230 kV breaker '155'	PECO (100%)
b1073	Install 2 new 230 kV breakers at Planebrook (on the 220-02 line terminal and on the 230 kV side of the #9 transformer)	PECO (100%)
b0829.2	Replace Whippain 230 kV breaker '525'	PECO (100%)
b0829.3	Replace Whippain 230 kV breaker '175'	PECO (100%)
b0829.4	Replace Plymouth Meeting 230 kV breaker '225'	PECO (100%)
b0829.5	Replace Plymouth Meeting 230 kV breaker '335'	PECO (100%)
b0841	Move the connection points for the 2nd Plymouth Meeting 230/138 kV XFMR	PECO (100%)

\* Neptune Regional Transmission System, LLC



**PECO Energy Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0842	Install a 2nd 230/138 kV XFMR and 35 MVAR CAP at Heaton 138 kV bus		PECO (100%)
b0842.1	Replace Heaton 138 kV breaker '150'		PECO (100%)
b0843	Install a 75 MVAR CAP at Llanerch 138 kV bus		PECO (100%)
b0844	Move the connection point for the Llanerch 138/69 kV XFMR		PECO (100%)
b0887	Replace Richmond-Tacony 69 kV line		PECO (100%)
b0920	Replace station cable at Whitpain and Jarrett substations on the Jarrett - Whitpain 230 kV circuit		PECO (100%)
b1014.1	Replace Circuit breaker, Station Cable, CTs and Wave Trap at Eddystone 230 kV		PECO (100%)
b1014.2	Replace Circuit breaker, Station Cable, CTs Disconnect Switch and Wave Trap at Island Rd. 230 kV		PECO (100%)
b1015	Replace Breakers #115 and #125 at Printz 230 kV substation		PECO (100%)
b1156.1	Upgrade at Richmond 230 kV breaker '525'		PECO (100%)
b1156.2	Upgrade at Richmond 230 kV breaker '415'		PECO (100%)
b1156.3	Upgrade at Richmond 230 kV breaker '475'		PECO (100%)
b1156.4	Upgrade at Richmond 230 kV breaker '575'		PECO (100%)

\* Neptune Regional Transmission System, LLC

**PECO Energy Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1156.5	Upgrade at Richmond 230 kV breaker '185'		PECO (100%)
b1156.6	Upgrade at Richmond 230 kV breaker '285'		PECO (100%)
b1156.7	Upgrade at Richmond 230 kV breaker '85'		PECO (100%)
b1156.8	Upgrade at Waneeta 230 kV breaker '425'		PECO (100%)
b1156.9	Upgrade at Emilie 230 kV breaker '815'		PECO (100%)
b1156.10	Upgrade at Plymouth Meeting 230 kV breaker '265'		PECO (100%)
b1156.11	Upgrade at Croydon 230 kV breaker '115'		PECO (100%)
b1156.12	Replace Emilie 138 kV breaker '190'		PECO (100%)
b1178	Add a second 230/138 kV transformer at Chichester. Add an inductor in series with the parallel transformers		JCPL (4.17%) / Neptune (0.44%) / PECO (82.73%) / PSEG (12.18%) / RE (0.48%)
b1179	Replace terminal equipment at Eddystone and Saville and replace underground section of the line		PECO (100%)
b1180.1	Replace terminal equipment at Chichester		PECO (100%)
b1180.2	Replace terminal equipment at Chichester		PECO (100%)
b1181	Install 230/138 kV transformer at Eddystone		PECO (100%)

\* Neptune Regional Transmission System, LLC

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1182	Reconductor Chichester – Saville 138 kV line and upgrade terminal equipment	JCPL (5.12%) / Neptune (0.54%) / PECO (79.46%) / PSEG (14.31%) / RE (0.57%)
b1183	Replace 230/69 kV transformer #6 at Cromby. Add two 50 MVAR 230 kV banks at Cromby	PECO (100%)
b1184	Add 138 kV breakers at Cromby, Perkiomen, and North Wales; add a 35 MVAR capacitor at Perkiomen 138 kV	PECO (100%)
b1185	Upgrade Eddystone 230 kV breaker #365	PECO (100%)
b1186	Upgrade Eddystone 230 kV breaker #785	PECO (100%)
b1197	Reconductor the PECO portion of the Burlington – Croydon circuit	PECO (100%)
b1198	Replace terminal equipments including station cable, disconnects and relay at Conowingo 230 kV station	PECO (100%)
b1338	Replace Printz 230 kV breaker ‘225’	PECO (100%)
b1339	Replace Printz 230 kV breaker ‘315’	PECO (100%)
b1340	Replace Printz 230 kV breaker ‘215’	PECO (100%)
b1398.6	Reconductor the Camden – Richmond 230 kV circuit (PECO portion) and upgrade terminal equipments at Camden substations	JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.8	Reconductor Richmond – Waneeta 230 kV and replace terminal equipments at Richmond and Waneeta substations	JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.12	Replace Graysferry 230 kV breaker ‘115’	PECO (100%)
b1398.13	Upgrade Peach Bottom 500 kV breaker ‘225’	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)†
b1398.14	Replace Whitpain 230 kV breaker ‘105’	PECO (100%)
b1590.1	Upgrade the PECO portion of the Camden – Richmond 230 kV to a six wire conductor and replace terminal equipment at Richmond.	BGE (3.06%) / ME (0.83%) / PECO (91.70%) / PEPCO (1.94%) / PPL (2.47%)
b1591	Reconductor the underground portion of the Richmond – Waneeta 230 kV and replace terminal equipment	BGE (4.54%) / DL (0.27%) / ME (1.04%) / PECO (88.11%) / PEPCO (2.79%) / PPL (3.25%)

\* Neptune Regional Transmission System, LLC

**PECO Energy Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1717	Install a second Waneeta 230/138 kV transformer on a separate bus section		PECO (100%)
b1718	Reconductor the Crescentville - Foxchase 138 kV circuit		PECO (100%)
b1719	Reconductor the Foxchase - Bluegrass 138 kV circuit		PECO (100%)
b1720	Increase the effective rating of the Eddystone 230/138 kV transformer by replacing a circuit breaker at Eddystone		PECO (100%)
b1721	Increase the rating of the Waneeta - Tuna 138 kV circuit by replacing two 138 kV CTs at Waneeta		PECO (100%)
b1722	Increase the normal rating of the Cedarbrook - Whitemarsh 69 kV circuit by changing the CT ratio and replacing station cable at Whitemarsh 69 kV		PECO (100%)
b1768	Install 39 MVAR capacitor at Cromby 138 kV bus		PECO (100%)
b1900	Add a 3rd 230 kV transmission line between Chichester and Linwood substations and remove the Linwood SPS		PECO (70.24%) / JCPL (6.07%) / ATSI (1.24%) / PSEG (21.01%) / RE (0.84%) / NEPTUNE* (0.60%)
b2140	Install a 3rd Emilie 230/138 kV transformer		PECO (100%)
b2145	Replace two sections of conductor inside Richmond substation		PECO (100%)

\* Neptune Regional Transmission System, LLC

## SCHEDULE 12 – APPENDIX

### (9) PPL Electric Utilities Corporation

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0074	Rebuild 12 miles of S. Akron – Berks 230 kV to double circuit, looping Met Ed's S. Lebanon – S. Reading line into Berks; replacement of S. Reading 230 kV breaker 107252	PPL (100%)
b0171.2	Replace wavetrap at Hosensack 500kV substation to increase rating of Elroy - Hosensack 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (6.06%) / DPL (8.20%) / JCPL (21.17%) / PECO (64.56%) / PSEG (0.01%)</u></p>
b0172.1	Replace wave trap at Alburtis 500kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.32%) / JCPL (33.44%) / NEPTUNE (5.35%) / PSEG (53.73%) / RE (2.16%)</u></p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.2	Replace two wave traps at Juniata 500 kV – on the two Juniata – Airydale 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (5.35%) / BGE (19.46%) / DL (0.25%) / JCPL (19.57%) / ME (6.75%) / NEPTUNE (2.17%) / PECO (20.81%) / PSEG (24.65%) / RE (0.99%)</p>
b0284.4	Changes at Juniata 500 kV substation	PPL (100%)
b0293.1	Replace wavetrap at the Martins Creek 230 kV bus	PPL (100%)
b0293.2	Raise the operating temperature of the 2-1590 ACSR to 140C for the Martins Creek – Portland 230 kV circuit	PPL (100%)
b0440	Spare Juniata 500/230 kV transformer	PPL (100%)
b0468	Build a new substation with two 150 MVA transformers between Dauphin and Hummelstown 230/69 kV substations by sectionalizing the Middletown Junction – New Lebanon 230 kV line	JCPL (4.56%) / Neptune* (0.37%) / PECO (1.79%) / PENELEC (0.33%) / PPL (86.79%) / PSEG (5.94%) / RE (0.22%)

\* Neptune Regional Transmission System, LLC

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0469	Install 130 MVAR capacitor at West Shore 230 kV line	PPL (100%)
b0487	Build new 500 kV transmission facilities from Susquehanna to Pennsylvania – New Jersey border at Bushkill	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>JCPL (33.89%) / NEPTUNE (4.26%) / PSEG (59.46%) / RE (2.39%)</u></p>
b0487.1	Install Lackawanna 500/230 kV transformer and upgrade 230 kV substation and switchyard	PENELEC (16.93%) / PPL (77.74%) / PSEG (5.14%) / RE (0.19%)
b0500.1	Conastone – Otter Creek 230 kV – Reconductor approximately 17.2 miles of 795 kcmil ACSR with new 795 kcmil ACSS operated at 160 deg C	AEC (6.31%) / DPL (8.70%) / JCPL (14.62%) / ME (10.65%) / Neptune* (1.38%) / PECO (15.75%) / PPL (21.14%) / PSEG (20.68%) / RE (0.77%)

\*Neptune Regional Transmission System, LLC

The Annual Revenue Requirements associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-8G.



**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0558	Install 250 MVAR capacitor at Juniata 500 kV substation	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0593	Eldred – Pine Grove 69 kV line Rebuild Part 2: 8 miles	PPL (100%)
b0595	Rebuild Lackawanna – Edella 69 kV line to double circuit	PPL (100%)
b0596	Reconductor and rebuild Stanton – Providence 69 kV #1 and #2 lines with 69 kV design; approximately 8 miles total	PPL (100%)
b0597	Reconductor Suburban – Providence 69 kV #1 and resectionalize the Suburban 69 kV lines	PPL (100%)
b0598	Reconductor Suburban Taps #1 and #2 for 69 kV line portions	PPL (100%)

\* Neptune Regional Transmission System, LLC

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0600	Tripp Park Substation: 69 kV tap off Stanton – Providence 69 kV line #3 to new substation		PPL (100%)
b0601	Jessup Substation: New 138/69 kV tap off of Peckville – Jackson 138/69 kV line		PPL (100%)
b0604	Add 150 MVA, 230/138/69 transformer #6 to Harwood substation		PPL (100%)
b0605	Reconductor Stanton – Old Forge 69 kV line and resectionalize the Jenkins – Scranton 69 kV #1 and #2 lines		PPL (100%)
b0606	New 138 kV tap off Monroe – Jackson 138 kV #1 line to Bartonsville substation		PPL (100%)
b0607	New 138 kV taps off Monroe – Jackson 138 kV lines to Stroudsburg substation		PPL (100%)
b0608	New 138 kV tap off Siegfried – Jackson 138 kV #2 to transformer #2 at Gilbert substation		PPL (100%)
b0610	At South Farmersville substation, a new 69 kV tap off Nazareth – Quarry #2 to transformer #2		PPL (100%)
b0612	Rebuild Siegfried – North Bethlehem portion (6.7 miles) of Siegfried – Quarry 69 kV line		PPL (100%)
b0613	East Tannersville Substation: New 138 kV tap to new substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0614	Elroy substation expansion and new Elroy – Hatfield 138/69 kV double circuit lines (1.9 miles)		PPL (100%)
b0615	Reconductor and rebuild 12 miles of Seidersville – Quakerstown 138/69 kV and a new 75 MVA, 230/69 kV transformer #4		PPL (100%)
b0616	New Springfield 230/69 kV substation and transmission line connections		PPL (100%)
b0620	New 138 kV line and terminal at Monroe 230/138 substation		PPL (100%)
b0621	New 138 kV line and terminal at Siegfried 230/138 kV substation and add a second circuit to Siegfried – Jackson for 8.0 miles		PPL (100%)
b0622	138 kV yard upgrades and transmission line rearrangements at Jackson 138/69 kV substation		PPL (100%)
b0623	New West Shore – Whitehill Taps 138/69 kV double circuit line (1.3 miles)		PPL (100%)
b0624	Reconductor Cumberland – Wertzville 69 kV portion (3.7 miles) of Cumberland – West Shore 69 kV line		PPL (100%)
b0625	Reconductor Mt. Allen – Rossmoyne 69 kV portions (1.6 miles) of West Shore – Cumberland #3 and #4 lines		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0627	Replace UG cable from Walnut substation to Center City Harrisburg substation for higher ampacity (0.25 miles)		PPL (100%)
b0629	Lincoln substation: 69 kV tap to convert to modified Twin A		PPL (100%)
b0630	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild from Landisville Tap – Mt. Joy (2 miles)		PPL (100%)
b0631	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild to double circuit from Mt. Joy – Donegal (2 miles)		PPL (100%)
b0632	Terminate new S. Manheim – Donegal 69 kV circuit into S. Manheim 69 kV #3		PPL (100%)
b0634	Rebuild S. Manheim – Fuller 69 kV portion (1.0 mile) of S. Manheim – West Hempfield 69 kV #3 line into a 69 kV double circuit		PPL (100%)
b0635	Reconductor Fuller Tap – Landisville 69 kV (4.1 miles) into a 69 kV double circuit		PPL (100%)
b0703	Berks substation modification on Berks – South Akron 230 kV line. Modification will isolate the line fault on the South Akron line and will allow Berks transformer #2 to be energized by the South Lebanon 230 kV circuit		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0705	New Derry – Millville 69 kV line		PPL (100%)
b0707	Construct Bohemia – Twin Lakes 69 kV line, install a 10.9 MVAR capacitor bank near Bohemia 69 kV substation		PPL (100%)
b0708	New 69 kV double circuit from Jackson – Lake Naomi Tap		PPL (100%)
b0709	Install new 69 kV double circuit from Carlisle – West Carlisle		PPL (100%)
b0710	Install a third 69 kV line from Reese’s Tap to Hershey substation		PPL (100%)
b0711	New 69 kV that taps West Shore – Cumberland 69 kV #1 to Whitehill 69 kV substation		PPL (100%)
b0712	Construct a new 69 kV line between Strassburg Tap and the Millwood – Engleside 69 kV #1 line		PPL (100%)
b0713	Construct a new 138 kV double circuit line between Dillersville Tap and the West Hempfield – Prince 138 kV line		PPL (100%)
b0714	Prepare Roseville Tap for 138 kV conversion		PPL (100%)
b0715	Transfer S. Akron – S. Manheim #1 and #2 lines from the S. Akron 69 kV Yard to the S. Akron 138 kV Yard; Install switches on S. Akron – S. Manheim 138 kV #1 and #2 lines		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0716	Add a second 69 kV line from Morgantown – Twin Valley		PPL (100%)
b0717	Rebuild existing Brunner Island – West Shore 230 kV line and add a second Brunner Island – West Shore 230 kV line		PPL (100%)
b0718	SPS scheme to drop 190 MVA of 69 kV radial load at West Shore and 56 MVA of 69 kV radial load at Cumberland		PPL (100%)
b0719	SPS scheme at Jenkins substation to open the Stanton #1 and Stanton #2 230 kV circuit breakers after the second contingency		PPL (100%)
b0791	Add a fourth 230/69 kV transformer at Stanton		PENELEC (9.55%) / PPL (90.45%)
b1074	Install motor operators on the Jenkins 230 kV ‘2W’ disconnect switch and build out Jenkins Bay 3 and have MOD ‘3W’ operated as normally open		PPL (100%)
b0881	Install motor operators on Susquehanna T21 - Susquehanna 230 kV line East CB at Susquehanna 230 kV switching station		PPL (100%)
b0908	Install motor operators at South Akron 230 kV		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0909	Convert Jenkins 230 kV yard into a 3-breaker ring bus		PPL (100%)
b0910	Install a second 230 kV line between Jenkins and Stanton		PPL (100%)
b0911	Install motor operators at Frackville 230 kV		PPL (100%)
b0912	Install 2, 10.8 MVAR capacitor banks at Scranton 69 kV		PPL (100%)
b0913	Extend Cando Tap to the Harwood-Jenkins #2 69 kV line		PPL (100%)
b0914	Build a 3rd 69 kV line from Harwood to Valmont Taps		PPL (100%)
b0915	Replace Walnut-Center City 69 kV cable		PPL (100%)
b0916	Reconductor Sunbury-Dalmatia 69 kV line		PPL (100%)
b1021	Install a new (#4) 138/69 kV transformer at Wescosville		PPL (100%)
b1196	Remove the Siegfried bus tie breaker and install a new breaker on the Martins Creek 230 kV line west bay to maintain two ties between the 230 kV buses		PPL (100%)
b1201	Rebuild the Hercules Tap to Double Circuit 69 kV		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1202	Mack-Macungie Double Tap, Single Feed Arrangement		PPL (100%)
b1203	Add the 2nd Circuit to the East Palmerton-Wagners-Lake Naomi 138/69 kV Tap		PPL (100%)
b1204	New Breinigsville 230-69 kV Substation		PPL (100%)
b1205	Siegfried-East Palmerton #1 69 kV Line- Install new 69 kV LSAB, Sectionalize, and Transfer Treichlers Substation		PPL (100%)
b1206	Siegfried-Quarry #1 & #2 69 kV Lines- Rebuild 3.3 mi from Quarry Substation to Macada Taps		PPL (100%)
b1209	Convert Neffsville Taps from 69 kV to 138 kV Operation		PPL (100%)
b1210	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 1 – operate on the 69 kV system)		PPL (100%)
b1211	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 2 – operate on the 138 kV system)		PPL (100%)
b1212	New 138 kV Taps to Flory Mill 138/69 kV Substation		PPL (100%)



**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1213	Convert East Petersburg Taps from 69 kV to 138 kV operation, install two 10.8 MVAR capacitor banks	PPL (100%)
b1214	Terminate South Manheim-Donegal #2 at South Manheim, Reduce South Manheim 69 kV Capacitor Bank, Resectionalize 69 kV	PPL (100%)
b1215	Reconductor and rebuild 16 miles of Peckville-Varden 69 kV line and 4 miles of Blooming Grove-Honesdale 69 kV line	PPL (100%)
b1216	Build approximately 2.5 miles of new 69 kV transmission line to provide a “double tap – single feed” connection to Kimbles 69/12 kV substation	PPL (100%)
b1217	Provide a “double tap – single feed” connection to Tafton 69/12 kV substation	PPL (100%)
b1524	Build a new Pocono 230/69 kV substation	PPL (100%)
b1524.1	Build approximately 14 miles new 230 kV South Pocono – North Pocono line	PPL (100%)
b1524.2	Install MOLSABs at Mt. Pocono substation	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1525	Build new West Pocono 230/69 kV Substation	PPL (100%)
b1525.1	Build approximately 14 miles new 230 kV Jenkins-West Pocono 230 kV Line	PPL (100%)
b1525.2	Install Jenkins 3E 230 kV circuit breaker	PPL (100%)
b1526	Install a new Honeybrook – Twin Valley 69/138 kV tie	PPL (100%)
b1527	Construct a new 230/69 kV North Lancaster substation. The sub will be supplied from the SAKR-BERK 230kV Line	PPL (100%)
b1527.1	Construct new 69/138 kV transmission from North Lancaster 230/69 kV sub to Brecknock and Honeybrook areas	PPL (100%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlerstown #1 & #2 69 kV lines at East Texas Substation	PPL (100%)
b1529	Add a double breaker 230 kV bay 3 at Hosensack	PPL (100%)
b1530	Replace Lock Haven 69kV ring bus with standard breaker and half design	PPL (100%)
b1532	Install new 32.4 MVAR capacitor bank at Sunbury	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1533	Rebuild Lycoming-Lock Haven #1 and Lycoming-Lock Haven #2 69kV lines		PPL (100%)
b1534	Rebuild 1.4 miles of the Sunbury-Milton 69kV		PPL (100%)
b1601	Re-configure the Breinigsville 500 kV substation with addition two 500 kV circuit breakers		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)†
b1602	Re-configure the Elimsport 230 kV substation to breaker and half scheme and install 80 MVAR capacitor		PPL (100%)
b1740	Install a 90 MVAR cap bank on the Frackville 230 kV bus #207973		PPL (100%)
b1756	Install a 3rd West Shore 230/69 kV transformer		PPL (100%)
b1757	Install a 230 kV motor-operated air-break switch on the Clinton - Elimsport 230 kV line		PPL (100%)

\* Neptune Regional Transmission System, LLC

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1758	Rebuild 1.65 miles of Columbia - Danville 69 kV line		PPL (100%)
b1759	Install a 69 kV 16.2 MVAR Cap at Milton substation		PPL (100%)
b1760	Install motor operated devices on the existing disconnect switches that are located on each side of all four 230 kV CBs at Stanton		PPL (100%)
b1761	Build a new Paupack - North 230 kV line (Approximately 21 miles)		PPL (100%)
b1762	Replace 3.7 miles of the existing 230 kV Blooming Grove - Peckville line by building 8.4 miles of new 230 kV circuit onto the Lackawanna - Hopatcong tower-line		PPL (100%)
b1763	Re-terminate the Peckville - Jackson and the Peckville - Varden 69 kV lines from Peckville into Lackawanna		PPL (100%)
b1764	Build a new 230-69 kV substations (Paupack)		PPL (100%)
b1765	Install a 16.2 MVAR capacitor bank at Bohemia 69-12 kV substation		PPL (100%)
b1766	Reconductor/rebuild 3.3 miles of the Siegfried - Quarry #1 and #2 lines		PPL (100%)
b1767	Install 6 motor-operated disconnect switches at Quarry substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1788	Install a new 500 kV circuit breaker at Wescosville		PPL (100%)
b1890	Add a second 230/69 kV transformer at North Pocono (NE/Pocono Reliability Project)		PPL (100%)
b1891	Build a new 230/138 kV Yard at Lackawanna (138 kV conversion from Lackawanna to Jenkins)		PPL (100%)
b1892	Rebuild the Throop Taps for 138 kV operation (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1893	Swap the Staton - Old Forge and Stanton - Brookside 69 kV circuits at Stanton (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1894	Rebuild and re-conductor 2.5 miles of the Stanton - Avoca 69 kV line		PPL (100%)
b1895	Rebuild and re-conductor 4.9 miles of the Stanton - Providence #1 69 kV line		PPL (100%)
b1896	Install a second 230/138 kV transformer and expand the 138 kV yard at Monroe		PPL (100%)
b1897	Build a new 230/138 kV substation at Jenkins (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1898	Install a 69 kV Tie Line between Richfield and Dalmatia substations		PPL (100%)
b2004	Replace the CTs and switch in South Akron Bay 4 to increase the rating		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2005	Replace the CTs and switch in SAKR Bay 3 to increase the rating of the Millwood-South Akron 230 kV Line and of the rating in Bay 3	PPL (100%)
b2006	Install North Lancaster 500/230 kV substation (below 500 kV portion)	AEC (1.11%) / JCPL (9.68%) / ME (19.56%) / Neptune* (0.76%) / PECO (6.06%) / PPL (50.95%) / PSEG (11.43%) / RE (0.45%)
b2006.1	Install North Lancaster 500/230 kV substation (500 kV portion)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> PPL (100%)
b2007	Install a 90 MVAR capacitor bank at the Frackville 230 kV Substation	PPL (100%)
b2158	Install 10.8 MVAR capacitor at West Carlisle 69/12 kV substation	PPL (100%)

\* Neptune Regional Transmission System, LLC

## SCHEDULE 12 – APPENDIX

### (10) Potomac Electric Power Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0146	Installation of (2) new 230 kV circuit breakers at Quince Orchard substation on circuits 23028 and 23029		PEPCO (100%)
b0219	Install two new 230 kV circuits between Palmers Corner and Blue Plains		PEPCO (100%)
b0228	Upgrade Burtonsville – Sandy Springs 230 kV circuit		PEPCO (100%)
b0238.1	Modify Dickerson Station H 230 kV		PEPCO (100%)
b0251	Install 100 MVAR of 230 kV capacitors at Bells Mill		PEPCO (100%)
b0252	Install 100 MVAR of 230 kV capacitors at Bells Mill		PEPCO (100%)
b0288	Brighton Substation – add 2 <sup>nd</sup> 1000 MVA 500/230 kV transformer, 2 500 kV circuit breakers and miscellaneous bus work		BGE (19.33%) / Dominion (17%) / PEPCO (63.67%)
b0319	Add a second 1000 MVA Bruches Hill 500/230 kV transformer		PEPCO (100%)
b0366	Install a 4 <sup>th</sup> Ritchie 230/69 kV transformer		PEPCO (100%)

\* Neptune Regional Transmission System, LLC

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.

## Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0367.1 Reconductor circuit “23035” for Dickerson – Quince Orchard 230 kV		AEC (1.78%) / BGE (26.54%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.80%) / PEPCO (52.50%) / PPL (3.23%) / PSEG (3.82%)
b0367.2 Reconductor circuit “23033” for Dickerson – Quince Orchard 230 kV		AEC (1.78%) / BGE (26.54%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.80%) / PEPCO (52.50%) / PPL (3.23%) / PSEG (3.82%)
b0375 Install 0.5% reactor at Dickerson on the Pleasant View – Dickerson 230 kV circuit		AEC (1.02%) / BGE (25.42%) / DPL (2.97%) / ME (1.72%) / PECO (3.47%) / PEPCO (65.40%)
b0467.1 Reconductor the Dickerson – Pleasant View 230 kV circuit		AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.54%) / PEPCO (41.86%) / PPL (2.07%)
b0478 Reconductor the four circuits from Burches Hill to Palmers Corner		APS (1.68%) / BGE (1.83%) / PEPCO (96.49%)
b0496 Replace existing 500/230 kV transformer at Brighton		APS (5.67%) / BGE (29.68%) / Dominion (10.91%) / PEPCO (53.74%)
b0499 Install third Burches Hill 500/230 kV transformer		APS (3.54%) / BGE (7.31%) / PEPCO (89.15%)

\*Neptune Regional Transmission System, LLC

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.



**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>
b0512.7	Advance n0772 (Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.8	Advance n0773 (Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>
b0512.9	Advance n0774 (Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.10	Advance n0775 (Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u></p>
b0512.11	Advance n0776 (Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u></p>

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.12	Advance n0777 (Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u></p>
b0512.13	Advance n0778 (Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u></p>

\* Neptune Regional Transmission System, LLC

## Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.14	Advance n0779 (Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>
b0512.15	Advance n0780 (Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>

\* Neptune Regional Transmission System, LLC

## Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.16	Advance n0781 (Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>
b0512.17	Advance n0782 (Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.18	Advance n0783 (Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u></p>
b0512.19	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u></p>

\* Neptune Regional Transmission System, LLC

## Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.20	Advance n0785 (Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>
b0512.21	Advance n0786 (Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>

\* Neptune Regional Transmission System, LLC



**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.22	Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u></p>
b0512.23	Advance n0788 (Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u></p>

\* Neptune Regional Transmission System, LLC

# **Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.24	Advance n0789 (Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>
b0512.25	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>

\* Neptune Regional Transmission System, LLC

## Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.26	Advance n0791 (Replace Chalk Point 230 Kv breaker (4C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>
b0512.27	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u>

\* Neptune Regional Transmission System, LLC

## Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.28	Advance n0793 (Replace Chalk Point 230 Kv breaker (6C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u></p>
b0512.29	Advance n0794 (Replace Chalk Point 230 Kv breaker (7C) with 80 kA breaker)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</u></p>
b0526	Build two Ritchie – Benning Station A 230 kV lines	AEC (0.77%) / BGE (16.76%) / DPL (1.22%) / JCPL (1.39%) / ME (0.59%) / Neptune* (0.13%) / PECO (2.10%) / PEPCO (74.86%) / PSEG (2.10%) / RE (0.08%)

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0561 Install 300 MVAR capacitor at Dickerson Station "D" 230 kV substation		AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0562 Install 500 MVAR capacitor at Brighton 230 kV substation		AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0637 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0638 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0639 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0640 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0641 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0642 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0643 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0644 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0645 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0646 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0647 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0648 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0649 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0701	Expand Benning 230 kV station, add a new 250 MVA 230/69 kV transformer at Benning Station 'A', new 115 kV Benning switching station	BGE (30.57%) / PEPCO (69.43%)
b0702	Add a second 50 MVAR 230 kV shunt reactor at the Benning 230 kV substation	PEPCO (100%)
b0720	Upgrade terminal equipment on both lines	PEPCO (100%)
b0721	Upgrade Oak Grove – Ritchie 23061 230 kV line	PEPCO (100%)
b0722	Upgrade Oak Grove – Ritchie 23058 230 kV line	PEPCO (100%)
b0723	Upgrade Oak Grove – Ritchie 23059 230 kV line	PEPCO (100%)
b0724	Upgrade Oak Grove – Ritchie 23060 230 kV line	PEPCO (100%)
b0730	Add slow oil circulation to the four Bells Mill Road – Bethesda 138 kV lines, add slow oil circulation to the two Buzzard Point – Southwest 138 kV lines; increasing the thermal ratings of these six lines allows for greater adjustment of the O Street phase shifters	PEPCO (100%)

\* Neptune Regional Transmission System, LLC

## Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0731	Implement an SPS to automatically shed load on the 34 kV Bells Mill Road bus for this N-2 condition. The SPS will be in effect for 2013 and 2014 until a third Bells Mill 230/34 kV is placed in-service in 2015	PEPCO (100%)
b0746	Upgrade circuit for 3,000 amps using the ACCR	AEC (0.73%) / BGE (31.05%) / DPL (1.45%) / PECO (2.46%) / PEPCO (62.88%) / PPL (1.43%)
b0747	Upgrade terminal equipment on both lines: Quince Orchard - Bells Mill 230 kV (030) and (028)	PEPCO (100%)
b0802	Advance n0259 (Replace Dickerson Station H Circuit Breaker 412A)	PEPCO (100%)
b0803	Advance n0260 (Replace Dickerson Station H Circuit Breaker 42A)	PEPCO (100%)
b0804	Advance n0261 (Replace Dickerson Station H Circuit Breaker 42C)	PEPCO (100%)
b0805	Advance n0262 (Replace Dickerson Station H Circuit Breaker 43A)	PEPCO (100%)
b0806	Advance n0264 (Replace Dickerson Station H Circuit Breaker 44A)	PEPCO (100%)

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0809 Advance n0267 (Replace Dickerson Station H Circuit Breaker 45B)		PEPCO (100%)
b0810 Advance n0270 (Replace Dickerson Station H Circuit Breaker 47A)		PEPCO (100%)
b0811 Advance n0726 (Replace Dickerson Station H Circuit Breaker SPARE )		PEPCO (100%)
b0845 Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker		PEPCO (100%)
b0846 Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker		PEPCO (100%)
b0847 Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker		PEPCO (100%)
b0848 Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker		PEPCO (100%)
b0849 Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker		PEPCO (100%)
b0850 Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker		PEPCO (100%)
b0851 Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker		PEPCO (100%)
b0852 Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker		PEPCO (100%)
b0853 Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker		PEPCO (100%)
b0854 Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker		PEPCO (100%)
b0855 Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker		PEPCO (100%)



**Potomac Electric Power Company (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0856	Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker		PEPCO (100%)
b0857	Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker		PEPCO (100%)
b0858	Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker		PEPCO (100%)
b0859	Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker		PEPCO (100%)
b0860	Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker		PEPCO (100%)
b0861	Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker		PEPCO (100%)
b0862	Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker		PEPCO (100%)
b0863	Replace Chalk Point 230 kV breaker (1C) with 80 kA breaker		PEPCO (100%)
b1104	Replace Burtonsville 230 kV breaker '1C'		PEPCO (100%)
b1105	Replace Burtonsville 230 kV breaker '2C'		PEPCO (100%)
b1106	Replace Burtonsville 230 kV breaker '3C'		PEPCO (100%)
b1107	Replace Burtonsville 230 kV breaker '4C'		PEPCO (100%)
b1125	Convert the 138 kV line from Buzzard 138 - Ritchie 851 to a 230 kV line and Remove 230/138 kV Transformer at Ritchie and install a spare 230/138 kV transformer at Buzzard Pt		APS (4.74%) / PEPCO (95.26%)
b1126	Upgrade the 230 kV line from Buzzard 016 – Ritchie 059		APS (4.74%) / PEPCO (95.26%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1592 Reconductor the Oak Grove – Bowie 230 kV circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.40%) / APS (3.83%) / BGE (65.87%) / DPL (4.44%) / JCPL (3.94%) / ME (2.16%) / Neptune* (0.39%) / PECO (8.37%) / PPL (2.84%) / PSEG (5.54%) / RE (0.22%)
b1593 Reconductor the Bowie - Burtonsville 230 kV circuit and upgrade terminal equipments at Bowie and Burtonsville 230 kV substations		AEC (2.40%) / APS (3.83%) / BGE (65.87%) / DPL (4.44%) / JCPL (3.94%) / ME (2.16%) / Neptune* (0.39%) / PECO (8.37%) / PPL (2.84%) / PSEG (5.54%) / RE (0.22%)
b1594 Reconductor the Oak Grove – Bowie 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.40%) / APS (3.83%) / BGE (65.87%) / DPL (4.44%) / JCPL (3.94%) / ME (2.16%) / Neptune* (0.39%) / PECO (8.37%) / PPL (2.84%) / PSEG (5.54%) / RE (0.22%)
b1595 Reconductor the Bowie – Burtonsville 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Burtonsville 230 kV substations		AEC (2.40%) / APS (3.83%) / BGE (65.87%) / DPL (4.44%) / JCPL (3.94%) / ME (2.16%) / Neptune* (0.39%) / PECO (8.37%) / PPL (2.84%) / PSEG (5.54%) / RE (0.22%)
b1596 Reconductor the Dickerson station “H” – Quince Orchard 230 kV ‘23032’ circuit and upgrade terminal equipments at Dickerson station “H” and Quince Orchard 230 kV substations		AEC (0.80%) / BGE (33.68%) / DPL (2.09%) / PECO (3.07%) / PEPCO (60.36%)

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1597	Reconductor the Oak Grove - Aquasco 230 kV '23062' circuit and upgrade terminal equipments at Oak Grove and Aquasco 230 kV substations	AEC (1.44%) / BGE (48.60%) / DPL (2.52%) / PECO (5.00%) / PEPCO (42.44%)
b2008	Reconductor feeder 23032 and 23034 to high temp. conductor (10 miles)	BGE (33.05%) / DPL (1.38%) / PECO (1.35%) / PEPCO (64.22%) /
b2136	Reconductor the Morgantown - V3-017 230 kV '23086' circuit and replace terminal equipments at Morgantown	PEPCO (100%)
b2137	Reconductor the Morgantown - Talbert 230 kV '23085' circuit and replace terminal equipment at Morgantown	PEPCO (100%)
b2138	Replace terminal equipments at Hawkins 230 kV substation	PEPCO (100%)

## SCHEDULE 12 – APPENDIX

### (12) Public Service Electric and Gas Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0025	Convert the Bergen-Leonia 138 Kv circuit to 230 kV circuit.	PSEG (100%)
b0090	Add 150 MVAR capacitor at Camden 230 kV	PSEG (100%)
b0121	Add 150 MVAR capacitor at Aldene 230 kV	PSEG (100%)
b0122	Bypass the Essex 138 kV series reactors	PSEG (100%)
b0125	Add Special Protection Scheme at Bridgewater to automatically open 230 kV breaker for outage of Branchburg – Deans 500 kV and Deans 500/230 kV #1 transformer	PSEG (100%)
b0126	Replace wavetrap on Branchburg – Flagtown 230 kV	PSEG (100%)
b0127	Replace terminal equipment to increase Brunswick – Adams – Bennetts Lane 230 kV to conductor rating	PSEG (100%)
b0129	Replace wavetrap on Flagtown – Somerville 230 kV	PSEG (100%)
b0130	Replace all derated Branchburg 500/230 kV transformers	AEC (1.36%) / JCPL (47.76%) / PSEG (50.88%)
b0134	Upgrade or Retension PSEG portion of Kittatinny – Newton 230 kV circuit	JCPL (51.11%) / PSEG (45.96%) / RE (2.93%)

The Annual Revenue Requirement for all Public Service Electric and Gas Company Projects (Required Transmission Enhancements) in this Section 12 shall be as specified in Attachment 7 of Attachment H-10A and under the procedures detailed in Attachment H-10B.

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0145	Build new Essex – Aldene 230 kV cable connected through a phase angle regulator at Essex	PSEG (21.78%) / JCPL (73.45%) / RE (4.77%)
b0157	Add 100MVAR capacitor at West Orange 138kV substation	PSEG (100%)
b0158	Close the Sunnymeade "C" and "F" bus tie	PSEG (100%)
b0159	Make the Bayonne reactor permanent installation	PSEG (100%)
b0160	Relocate the X-2250 circuit from Hudson 1-6 bus to Hudson 7-12 bus	PSEG (100%)
b0161	Install 230/138kV transformer at Metuchen substation	PSEG (99.80%) / RE (0.20%)
b0162	Upgrade the Edison – Meadow Rd 138kV “Q” circuit	PSEG (100%)
b0163	Upgrade the Edison – Meadow Rd 138kV “R” circuit	PSEG (100%)
b0169	Build a new 230 kV section from Branchburg – Flagtown and move the Flagtown – Somerville 230 kV circuit to the new section	AEC (1.76%) / JCPL (26.50%) / Neptune* (10.85%) / PSEG (60.89%)
b0170	Reconductor the Flagtown-Somerville-Bridgewater 230 kV circuit with 1590 ACSS	JCLP (42.95%) / Neptune* (17.90%) / PSEG (38.36%) RE (0.79%)

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b0172.2	Replace wave trap at Branchburg 500kV substation		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  AEC (5.32%) / JCPL (33.44%) / NEPTUNE (5.35%) / PSEG (53.73%) / RE (2.16%)</p>
b0184	Replace Hudson 230kV circuit breakers #1-2		PSEG (100%)
b0185	Replace Deans 230kV circuit breakers #9-10		PSEG (100%)
b0186	Replace Essex 230kV circuit breaker #5-6		PSEG (100%)
b1082	Install 230/138 kV transformer at Bergen substation		PENELEC (16.52%) / PSEG (80.29%) / RE (3.19%)

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0201	Branchburg substation: replace wave trap on Branchburg – Readington 230 kV circuit		PSEG (100%)
b0213.1	Replace New Freedom 230 kV breaker BS2-6		PSEG (100%)
b0213.3	Replace New Freedom 230 kV breaker BS2-8		PSEG (100%)
b0274	Replace both 230/138 kV transformers at Roseland		PSEG (100%)
b0275	Upgrade the two 138 kV circuits between Roseland and West Orange		PSEG (100%)
b0278	Install 228 MVAR capacitor at Roseland 230 kV substation		PSEG (100%)
b0290	Install 400 MVAR capacitor in the Branchburg 500 kV vicinity		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (5.32%) / JCPL (33.44%) / NEPTUNE (5.35%) / PSEG (53.73%) / RE (2.16%)</u>
b0358	Reconductor the PSEG portion of Buckingham – Pleasant Valley 230 kV, replace wave trap and metering transformer		PSEG (100%)

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0368	Reconductor Tosco – G22_MTX 230 kV circuit with 1033 bundled ACSS		PSEG (100%)
b0371	Make the Metuchen 138 kV bus solid and upgrade 6 breakers at the Metuchen substation		PSEG (100%)
b0372	Make the Athenia 138 kV bus solid and upgrade 2 breakers at the Athenia substation		PSEG (100%)
b0395	Replace Hudson 230 kV breaker BS4-5		PSEG (100%)
b0396	Replace Hudson 230 kV breaker BS1-6		PSEG (100%)
b0397	Replace Hudson 230 kV breaker BS3-4		PSEG (100%)
b0398	Replace Hudson 230 kV breaker BS5-6		PSEG (100%)
b0401.1	Replace Roseland 230 kV breaker BS6-7		PSEG (100%)
b0401.2	Replace Roseland 138 kV breaker O-1315		PSEG (100%)
b0401.3	Replace Roseland 138 kV breaker S-1319		PSEG (100%)
b0401.4	Replace Roseland 138 kV breaker T-1320		PSEG (100%)
b0401.5	Replace Roseland 138 kV breaker G-1307		PSEG (100%)
b0401.6	Replace Roseland 138 kV breaker P-1316		PSEG (100%)
b0401.7	Replace Roseland 138 kV breaker 220-4		PSEG (100%)



**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0401.8	Replace W. Orange 138 kV breaker 132-4	PSEG (100%)
b0411	Install 4 <sup>th</sup> 500/230 kV transformer at New Freedom	AEC (47.01%) / JCPL (7.04%) / Neptune* (0.28%) / PECO (23.36%) / PSEG (22.31%)
b0423	Reconductor Readington (2555) – Branchburg (4962) 230 kV circuit w/1590 ACSS	PSEG (100%)
b0424	Replace Readington wavetrap on Readington (2555) – Roseland (5017) 230 kV circuit	PSEG (100%)
b0425	Reconductor Linden (4996) – Tosco (5190) 230 kV circuit w/1590 ACSS (Assumes operating at 220 degrees C)	PSEG (100%)
b0426	Reconductor Tosco (5190) – G22_MTX5 (90220) 230 kV circuit w/1590 ACSS (Assumes operation at 220 degrees C)	PSEG (100%)
b0427	Reconductor Athenia (4954) – Saddle Brook (5020) 230 kV circuit river section	PSEG (100%)
b0428	Replace Roseland wavetrap on Roseland (5019) – West Caldwell “G” (5089) 138 kV circuit	PSEG (100%)
b0429	Reconductor Kittatinny (2553) – Newton (2535) 230 kV circuit w/1590 ACSS	JCPL (42.63%) / Neptune* (3.65%) / PSEG (51.45%) / RE (2.27%)
b0439	Spare Deans 500/230 kV transformer	PSEG (100%)
b0446.1	Upgrade Bayway 138 kV breaker #2-3	PSEG (100%)
b0446.2	Upgrade Bayway 138 kV breaker #3-4	PSEG (100%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0446.3	Upgrade Bayway 138 kV breaker #6-7	PSEG (100%)
b0446.4	Upgrade the breaker associated with TX 132-5 on Linden 138 kV	PSEG (100%)
b0470	Install 138 kV breaker at Roseland and close the Roseland 138 kV buses	PSEG (100%)
b0471	Replace the wave traps at both Lawrence and Pleasant Valley on the Lawrence – Pleasant Vallen 230 kV circuit	PSEG (100%)
b0472	Increase the emergency rating of Saddle Brook – Athenia 230 kV by 25% by adding forced cooling	PSEG (96.40%) / RE (3.60%)
b0473	Move the 150 MVAR mobile capacitor from Aldene 230 kV to Lawrence 230 kV substation	PSEG (100%)
b0489	Build new 500 kV transmission facilities from Pennsylvania – New Jersey border at Bushkill to Roseland	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)†
		<b><u>DFAX Allocation:</u></b> <u>JCPL (39.91%) / NEPTUNE (3.86%) / PSEG (54.05%) / RE (2.18%)</u>

\* Neptune Regional Transmission System, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b489.1	Replace Athenia 230 kV breaker 31H		PSEG (100%)
b489.2	Replace Bergen 230 kV breaker 10H		PSEG (100%)
b489.3	Replace Saddlebrook 230 kV breaker 21P		PSEG (100%)
b0489.4	Install two Roseland 500/230 kV transformers as part of the Susquehanna – Roseland 500 kV project		AEC (5.14%) / ComEd (0.29%) / Dayton (0.03%) / DPL (1.78%) / JCPL (33.04%) / Neptune* (6.38%) / PECO (10.14%) / PENELEC (0.57%) / PSEG (41.10%) / RE (1.53%) ††
b0489.5	Replace Roseland 230 kV breaker '42H' with 80 kA		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  JCPL (39.91%) / NEPTUNE (3.86%) / PSEG (54.05%) / RE (2.18%)</p>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.6	Replace Roseland 230 kV breaker '51H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd (13.31%)  / Dayton (2.11%) / DEOK  (3.29%) / DL (1.75%) / DPL  (2.50%) / Dominion (12.86%) /  EKPC (1.87%) / JCPL (3.74%) /  ME (1.90%) / NEPTUNE*  (0.44%) / PECO (5.34%) /  PENELEC (1.89%) / PEPCO  (3.99%) / PPL (4.84%) / PSEG  (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>JCPL (39.91%) / NEPTUNE</u>  <u>(3.86%) / PSEG (54.05%) / RE</u>  <u>(2.18%)</u></p>
b0489.7	Replace Roseland 230 kV breaker '71H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd (13.31%)  / Dayton (2.11%) / DEOK  (3.29%) / DL (1.75%) / DPL  (2.50%) / Dominion (12.86%) /  EKPC (1.87%) / JCPL (3.74%) /  ME (1.90%) / NEPTUNE*  (0.44%) / PECO (5.34%) /  PENELEC (1.89%) / PEPCO  (3.99%) / PPL (4.84%) / PSEG  (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>JCPL (39.91%) / NEPTUNE</u>  <u>(3.86%) / PSEG (54.05%) / RE</u>  <u>(2.18%)</u></p>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.8	Replace Roseland 230 kV breaker '31H' with 80 kA	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>JCPL (39.91%) / NEPTUNE</u>  <u>(3.86%) / PSEG (54.05%) / RE</u>  <u>(2.18%)</u></p>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.9	Replace Roseland 230 kV breaker '11H' with 80 kA	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>JCPL (39.91%) / NEPTUNE</u> <u>(3.86%) / PSEG (54.05%) / RE</u> <u>(2.18%)</u>
b0489.10	Replace Roseland 230 kV breaker '21H'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>JCPL (39.91%) / NEPTUNE</u> <u>(3.86%) / PSEG (54.05%) / RE</u> <u>(2.18%)</u>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.11	Replace Roseland 230 kV breaker '32H'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>JCPL (39.91%) / NEPTUNE (3.86%) / PSEG (54.05%) / RE (2.18%)</u>
b0489.12	Replace Roseland 230 kV breaker '12H'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>JCPL (39.91%) / NEPTUNE (3.86%) / PSEG (54.05%) / RE (2.18%)</u>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.13	Replace Roseland 230 kV breaker '52H'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>JCPL (39.91%) / NEPTUNE</u> <u>(3.86%) / PSEG (54.05%) / RE</u> <u>(2.18%)</u>
b0489.14	Replace Roseland 230 kV breaker '41H'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>JCPL (39.91%) / NEPTUNE</u> <u>(3.86%) / PSEG (54.05%) / RE</u> <u>(2.18%)</u>

\* Neptune Regional Transmission System, LLC



**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.15	Replace Roseland 230 kV breaker '72H'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>JCPL (39.91%) / NEPTUNE</u> <u>(3.86%) / PSEG (54.05%) / RE</u> <u>(2.18%)</u>
b0498	Loop the 5021 circuit into New Freedom 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (9.56%) / JCPL (26.03%)</u> <u>/ NEPTUNE (3.02%) / PECO</u> <u>(18.39%) / PSEG (41.34%) /</u> <u>RE (1.66%)</u>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0498.1	Upgrade the 20H circuit breaker		PSEG (100%)
b0498.2	Upgrade the 22H circuit breaker		PSEG (100%)
b0498.3	Upgrade the 30H circuit breaker		PSEG (100%)
b0498.4	Upgrade the 32H circuit breaker		PSEG (100%)
b0498.5	Upgrade the 40H circuit breaker		PSEG (100%)
b0498.6	Upgrade the 42H circuit breaker		PSEG (100%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0565	Install 100 MVAR capacitor at Cox's Corner 230 kV substation		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0578	Replace Essex 138 kV breaker 4LM (C1355 line to ECRRF)		PSEG (100%)
b0579	Replace Essex 138 kV breaker 1LM (220-1 TX)		PSEG (100%)
b0580	Replace Essex 138 kV breaker 1BM (BS1-3 tie)		PSEG (100%)
b0581	Replace Essex 138 kV breaker 2BM (BS3-4 tie)		PSEG (100%)
b0582	Replace Linden 138 kV breaker 3 (132-7 TX)		PSEG (100%)
b0592	Replace Metuchen 138 kV breaker '2-2 Transfer'		PSEG (100%)
b0664	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0665	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0668	Reconductor with 2x1033 ACSS conductor		JCPL (39.41%) / NEPTUNE* (20.38%) / PSEG (38.76%) / RE (1.45%)
b0671	Replace terminal equipment at both ends of line		PSEG (100%)
b0743	Add a bus tie breaker at Roseland 138 kV		PSEG (100%)
b0812	Increase operating temperature on line for one year to get 925E MVA rating		PSEG (100%)
b0813	Reconductor Hudson – South Waterfront 230 kV circuit		BGE (1.25%) / JCPL (9.92%) / NEPTUNE* (0.87%) / PEPCO (1.11%) / PSEG (83.73%) / RE (3.12%)

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814	New Essex – Kearney 138 kV circuit and Kearney 138 kV bus tie	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.1	Replace Kearny 138 kV breaker '1-SHT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.2	Replace Kearny 138 kV breaker '15HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.3	Replace Kearny 138 kV breaker '14HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.4	Replace Kearny 138 kV breaker '10HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.5	Replace Kearny 138 kV breaker '2HT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.6	Replace Kearny 138 kV breaker '22HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.7	Replace Kearny 138 kV breaker '4HT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.8	Replace Kearny 138 kV breaker '25HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.9	Replace Essex 138 kV breaker '2LM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.10	Replace Essex 138 kV breaker '1BT' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.11	Replace Essex 138 kV breaker '2PM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.12	Replace Marion 138 kV breaker '2HM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.13	Replace Marion 138 kV breaker '2LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.14	Replace Marion 138 kV breaker '1LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.15	Replace Marion 138 kV breaker '6PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.16	Replace Marion 138 kV breaker '3PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.17	Replace Marion 138 kV breaker '4LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0814.18	Replace Marion 138 kV breaker '3LM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.19	Replace Marion 138 kV breaker '1HM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.20	Replace Marion 138 kV breaker '2PM3' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.21	Replace Marion 138 kV breaker '2PM1' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.22	Replace ECRR 138 kV breaker '903'		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.23	Replace Foundry 138 kV breaker '21P'		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.24	Change the contact parting time on Essex 138 kV breaker '3LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.25	Change the contact parting time on Essex 138 kV breaker '2BM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0814.26	Change the contact parting time on Essex 138 kV breaker '1BM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.27	Change the contact parting time on Essex 138 kV breaker '3PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.28	Change the contact parting time on Essex 138 kV breaker '4LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.29	Change the contact parting time on Essex 138 kV breaker '1PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.30	Change the contact parting time on Essex 138 kV breaker '1LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

\*Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0829	Build Branchburg to Roseland 500 kV circuit as part of Branchburg – Hudson 500 kV project	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0829.6	Replace Branchburg 500 kV breaker 91X	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.13%) / RE (3.87%)</p>
b0829.9	Replace Branchburg 230 kV breaker 102H	PSEG (100%)

\*Neptune Regional Transmission System, LLC



**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0829.11	Replace Branchburg 230 kV breaker 32H		PSEG (100%)
b0829.12	Replace Branchburg 230 kV breaker 52H		PSEG (100%)
b0830	Build Roseland - Hudson 500 kV circuit as part of Branchburg – Hudson 500 kV project		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0830.1	Replace Roseland 230 kV breaker '82H' with 80 kA		PSEG (100%)
b0830.2	Replace Roseland 230 kV breaker '91H' with 80 kA		PSEG (100%)
b0830.3	Replace Roseland 230 kV breaker '22H' with 80 kA		PSEG (100%)

\*Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0831	Replace 138/13 kV transformers with 230/13 kV units as part of Branchburg – Hudson 500 kV project		ComEd (2.57%) / Dayton (0.09%) / PENELEC (2.82%) / PSEG (90.97%) / RE (3.55%)
b0832	Build Hudson 500 kV switching station as part of Branchburg – Hudson 500 kV project		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0833	Build Roseland 500 kV switching station as part of Branchburg – Hudson 500 kV project		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

\*Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0834	Convert the E-1305/F-1306 to one 230 kV circuit as part of Branchburg – Hudson 500 kV project		ComEd (2.57%) / Dayton (0.09%) / PENELEC (2.82%) / PSEG (90.97%) / RE (3.55%)
b0835	Build Hudson 230 kV transmission lines as part of Roseland – Hudson 500 kV project as part of Branchburg – Hudson 500 kV project		ComEd (2.57%) / Dayton (0.09%) / PENELEC (2.82%) / PSEG (90.97%) / RE (3.55%)
b0836	Install transformation at new Hudson 500 kV switching station and perform Hudson 230 kV and 345 kV station work as part of Branchburg – Hudson 500 kV project		ComEd (2.57%) / Dayton (0.09%) / PENELEC (2.82%) / PSEG (90.97%) / RE (3.55%)
b0882	Replace Hudson 230 kV breaker 1HA with 80 kA		PSEG (100%)
b0883	Replace Hudson 230 kV breaker 2HA with 80 kA		PSEG (100%)
b0884	Replace Hudson 230 kV breaker 3HB with 80 kA		PSEG (100%)
b0885	Replace Hudson 230 kV breaker 4HA with 80 kA		PSEG (100%)
b0886	Replace Hudson 230 kV breaker 4HB with 80 kA		PSEG (100%)
b0889	Replace Bergen 230 kV breaker '21H'		PSEG (100%)
b0890	Upgrade New Freedom 230 kV breaker '21H'		PSEG (100%)
b0891	Upgrade New Freedom 230 kV breaker '31H'		PSEG (100%)
b0899	Replace ECRR 138 kV breaker 901		PSEG (100%)
b0900	Replace ECRR 138 kV breaker 902		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1013	Replace Linden 138 kV breaker '7PB'		PSEG (100%)
b1017	Reconductor South Mahwah - Waldwick 345 kV J-3410 circuit		JCPL (29.27%) / NEPTUNE* (2.76%) / PSEG (65.42%) / RE (2.55%)
b1018	Reconductor South Mahwah - Waldwick 345 kV K-3411 circuit		JCPL (29.44%) / NEPTUNE* (2.76%) / PSEG (65.25%) / RE (2.55%)
b1019.1	Replace wave trap, line disconnect and ground switch at Roseland on the F-2206 circuit		PSEG (100%)
b1019.2	Replace wave trap, line disconnect and ground switch at Roseland on the B-2258 circuit		PSEG (100%)
b1019.3	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.4	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the B-2258 circuit		PSEG (100%)
b1019.5	Replace wave trap, line disconnect and ground switch at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.6	Replace line disconnect and ground switch at Cedar Grove on the K-2263 circuit		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1019.7	Replace 2-4 and 4-5 section disconnect and ground switches at Clifton on the B-2258 circuit	PSEG (100%)
b1019.8	Replace 1-2 and 2-3 section disconnect and ground switches at Clifton on the K-2263 circuit	PSEG (100%)
b1019.9	Replace line, ground, 230 kV main bus disconnects at Athenia on the B-2258 circuit	PSEG (100%)
b1019.10	Replace wave trap, line, ground 230 kV breaker disconnect and 230 kV main bus disconnects at Athenia on the K-2263 circuit	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1082.1	Replace Bergen 138 kV breaker '30P' with 80 kA		PSEG (100%)
b1082.2	Replace Bergen 138 kV breaker '80P' with 80 kA		PSEG (100%)
b1082.3	Replace Bergen 138 kV breaker '70P' with 80 kA		PSEG (100%)
b1082.4	Replace Bergen 138 kV breaker '90P' with 63 kA		PSEG (100%)
b1082.5	Replace Bergen 138 kV breaker '50P' with 63 kA		PSEG (100%)
b1082.6	Replace Bergen 230 kV breaker '12H' with 80 kA		PSEG (100%)
b1082.7	Replace Bergen 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1082.8	Replace Bergen 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1082.9	Replace Bergen 230 kV breaker '20H' with 80 kA		PSEG (100%)
b1098	Re-configure the Bayway 138 kV substation and install three new 138 kV breakers		PSEG (100%)
b1099	Build a new 230 kV substation by tapping the Aldene – Essex circuit and install three 230/26 kV transformers, and serve some of the Newark area load from the new station		PSEG (100%)
b1100	Build a new 138 kV circuit from Bayonne to Marion		PSEG (100%)
b1101	Re-configure the Cedar Grove substation with breaker and half scheme and build a new 69 kV circuit from Cedar Grove to Hinchman		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1154	Convert the West Orange 138 kV substation, the two Roseland – West Orange 138 kV circuits, and the Roseland – Sewaren 138 kV circuit from 138 kV to 230 kV	PSEG (96.18%) / RE (3.82%)
b1155	Build a new 230 kV circuit from Branchburg to Middlesex Sw. Rack. Build a new 230 kV substation at Middlesex	JCPL (4.61%) / PSEG (91.75%) / RE (3.64%)
b1155.3	Replace Branchburg 230 kV breaker '81H' with 63 kA	PSEG (100%)
b1155.4	Replace Branchburg 230 kV breaker '72H' with 63 kA	PSEG (100%)
b1155.5	Replace Branchburg 230 kV breaker '61H' with 63 kA	PSEG (100%)
b1155.6	Replace Branchburg 230 kV breaker '41H' with 63 kA	PSEG (100%)
b1156	Convert the Burlington, Camden, and Cuthbert Blvd 138 kV substations, the 138 kV circuits from Burlington to Camden, and the 138 kV circuit from Camden to Cuthbert Blvd. from 138 kV to 230 kV	PSEG (96.18%) / RE (3.82%)
b1156.13	Replace Camden 230 kV breaker '22H' with 80 kA	PSEG (100%)
b1156.14	Replace Camden 230 kV breaker '32H' with 80 kA	PSEG (100%)
b1156.15	Replace Camden 230 kV breaker '21H' with 80 kA	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1156.16	Replace New Freedom 230 kV breaker '50H' with 63 kA		PSEG (100%)
b1156.17	Replace New Freedom 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156.18	Replace New Freedom 230 kV breaker '51H' with 63 kA		PSEG (100%)
b1156.19	Rebuild Camden 230 kV to 80 kA		PSEG (100%)
b1156.20	Rebuild Burlington 230 kV to 80 kA		PSEG (100%)
b1197.1	Reconductor the PSEG portion of the Burlington – Croydon circuit with 1590 ACSS		PSEG (100%)
b1228	Re-configure the Lawrence 230 kV substation to breaker and half		PSEG (96.18%) / RE (3.82%)
b1255	Build a new 69 kV substation (Ridge Road) and build new 69 kV circuits from Montgomery – Ridge Road – Penns Neck/Dow Jones		PSEG (96.18%) / RE (3.82%)
b1304.1	Convert the existing 'D1304' and 'G1307' 138 kV circuits between Roseland – Kearny – Hudson to 230 kV operation		AEC (0.28%) / BGE (1.18%) / ComEd (2.83%) / Dayton (0.16%) / JCPL (1.43%) / Neptune (0.09%) / PENELEC (3.63%) / PEPCO (1.27%) / PSEG (85.73%) / RE (3.40%)



**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1304.2	Expand existing Bergen 230 kV substation and reconfigure the Athenia 230 kV substation to breaker and a half scheme	AEC (0.28%) / BGE (1.18%) / ComEd (2.83%) / Dayton (0.16%) / JCPL (1.43%) / Neptune (0.09%) / PENELEC (3.63%) / PEPCO (1.27%) / PSEG (85.73%) / RE (3.40%)
b1304.3	Build second 230 kV underground cable from Bergen to Athenia	AEC (0.28%) / BGE (1.18%) / ComEd (2.83%) / Dayton (0.16%) / JCPL (1.43%) / Neptune (0.09%) / PENELEC (3.63%) / PEPCO (1.27%) / PSEG (85.73%) / RE (3.40%)
b1304.4	Build second 230 kV underground cable from Hudson to South Waterfront	AEC (0.28%) / BGE (1.18%) / ComEd (2.83%) / Dayton (0.16%) / JCPL (1.43%) / Neptune (0.09%) / PENELEC (3.63%) / PEPCO (1.27%) / PSEG (85.73%) / RE (3.40%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.5	Replace Athenia 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.6	Replace Athenia 230 kV breaker '41H' with 80 kA		PSEG (100%)
b1304.7	Replace South Waterfront 230 kV breaker '12H' with 80 kA		PSEG (100%)
b1304.8	Replace South Waterfront 230 kV breaker '22H' with 80 kA		PSEG (100%)
b1304.9	Replace South Waterfront 230 kV breaker '32H' with 80 kA		PSEG (100%)
b1304.10	Replace South Waterfront 230 kV breaker '52H' with 80 kA		PSEG (100%)
b1304.11	Replace South Waterfront 230 kV breaker '62H' with 80 kA		PSEG (100%)
b1304.12	Replace South Waterfront 230 kV breaker '72H' with 80 kA		PSEG (100%)
b1304.13	Replace South Waterfront 230 kV breaker '82H' with 80 kA		PSEG (100%)
b1304.14	Replace Essex 230 kV breaker '20H' with 80 kA		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.15	Replace Essex 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.16	Replace Essex 230 kV breaker '10H' with 80 kA		PSEG (100%)
b1304.17	Replace Essex 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1304.18	Replace Essex 230 kV breaker '11HL' with 80 kA		PSEG (100%)
b1304.19	Replace Newport R 230 kV breaker '23H' with 63 kA		PSEG (100%)
b1304.20	Rebuild Athenia 230 kV substation to 80 kA		PSEG (100%)
b1304.21	Rebuild Bergen 230 kV substation to 80 kA		PSEG (100%)
b1398	Build two new parallel underground circuits from Gloucester to Camden		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.1	Install shunt reactor at Gloucester to offset cable charging		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.2	Reconfigure the Cuthbert station to breaker and a half scheme		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.3	Build a second 230 kV parallel overhead circuit from Mickelton – Gloucester		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1398.4	Reconductor the existing Mickleton – Gloucester 230 kV circuit (PSEG portion)		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.7	Reconductor the Camden – Richmond 230 kV circuit (PSEG portion) and upgrade terminal equipments at Camden substations		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.15	Replace Gloucester 230 kV breaker '21H' with 63 kA		PSEG (100%)
b1398.16	Replace Gloucester 230 kV breaker '51H' with 63 kA		PSEG (100%)
b1398.17	Replace Gloucester 230 kV breaker '56H' with 63 kA		PSEG (100%)
b1398.18	Replace Gloucester 230 kV breaker '26H' with 63 kA		PSEG (100%)
b1398.19	Replace Gloucester 230 kV breaker '71H' with 63 kA		PSEG (100%)
b1399	Convert the 138 kV path from Aldene – Springfield Rd. – West Orange to 230 kV		PSEG (96.18%) / RE (3.82%)
b1400	Install 230 kV circuit breakers at Bennetts Ln. “F” and “X” buses		PSEG (100%)

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1410	Replace Salem 500 kV breaker '11X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>PSEG (96.13%) / RE (3.87%)</u></b></p>
b1411	Replace Salem 500 kV breaker '12X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <b><u>PSEG (96.13%) / RE (3.87%)</u></b></p>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1412	Replace Salem 500 kV breaker '20X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.13%) / RE (3.87%)</p>
b1413	Replace Salem 500 kV breaker '21X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.13%) / RE (3.87%)</p>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1414	Replace Salem 500 kV breaker '31X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.13%) / RE (3.87%)</p>
b1415	Replace Salem 500 kV breaker '32X'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  PSEG (96.13%) / RE (3.87%)</p>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1539	Replace Tosco 230 kV breaker 'CB1' with 63 kA		PSEG (100%)
b1540	Replace Tosco 230 kV breaker 'CB2' with 63 kA		PSEG (100%)
b1541	Open the Hudson 230 kV bus tie		PSEG (100%)
b1588	Reconductor the Eagle Point - Gloucester 230 kV circuit #1 and #2 with higher conductor rating		JCPL (10.48%) / Neptune* (1.00%) / PECO (31.30%) / PSEG (55.03%) / RE (2.19%)
b1589	Re-configure the Kearny 230 kV substation and loop the P-2216-1 (Essex - NJT Meadows) 230 kV circuit		ATSI (10.02%) / PENELEC (9.74%) / PSEG (77.16%) / RE (3.08%)
b1590	Upgrade the PSEG portion of the Camden Richmond 230 kV circuit to six wire conductor and replace terminal equipment at Camden		BGE (3.06%) / ME (0.83%) / PECO (91.70%) / PEPCO (1.94%) / PPL (2.47%)
b1749	Advance n1237 (Replace Essex 230 kV breaker '22H' with 80kA)		PSEG (100%)
b1750	Advance n0666.5 (Replace Hudson 230 kV breaker '1HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1751	Advance n0666.3 (Replace Hudson 230 kV breaker '2HA' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1752	Advance n0666.10 (Replace Hudson 230 kV breaker '2HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1753	Marion 138 kV breaker '7PM' - delay the relay time to increase the contact parting time to 2.5 cycles		PSEG (100%)
b1754	Marion 138 kV breaker '3PM' - delay the relay time to increase the contact parting time to 2.5 cycles		PSEG (100%)
b1755	Marion 138 kV breaker '6PM' - delay the relay time to increase the contact parting time to 2.5 cycles		PSEG (100%)
b1787	Build a second 230 kV circuit from Cox's Corner - Lumberton		AEC (4.97%) / JCPL (44.34%) / NEPTUNE* (0.53%) / PSEG (48.23%) / RE (1.93%)
b2034	Install a reactor along the Kearny - Essex 138 kV line		PSEG (100%)
b2035	Replace Sewaren 138 kV breaker '11P'		PSEG (100%)
b2036	Replace Sewaren 138 kV breaker '21P'		PSEG (100%)
b2037	Replace PVSC 138 kV breaker '452'		PSEG (100%)
b2038	Replace PVSC 138 kV breaker '552'		PSEG (100%)

\*Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2039	Replace Bayonne 138 kV breaker '11P'		PSEG (100%)
b2139	Reconductor the Mickleton - Gloucester 230 kV parallel circuits with double bundle conductor		PSEG (61.11%) / PECO (36.45%) / RE (2.44%)
b2146	Re-configure the Brunswick 230 kV and 69 kV substations		PSEG (96.16%) / RE (3.84%)
b2151	Construct Jackson Rd. 69 kV substation and loop the Cedar Grove - Hinchmans Ave into Jackson Rd. and construct Hawthorne 69 kV substation and build 69 kV circuit from Hinchmans Ave - Hawthorne - Fair Lawn		PSEG (100%)
b2159	Reconfigure the Linden, Bayway, North Ave, and Passaic Valley S.C. 138 kV substations. Construct and loop new 138 kV circuit to new airport station		PSEG (96.16%) / RE (3.84%)

\*Neptune Regional Transmission System, LLC

## SCHEDULE 12 – APPENDIX

### (14) Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0216	Install -100/+525 MVAR dynamic reactive device at Black Oak	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0218	Install third Wylie Ridge 500/345kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0220	Upgrade coolers on Wylie Ridge 500/345 kV #7	
b0229	Install fourth Bedington 500/138 kV	
b0230	Install fourth Meadowbrook 500/138 kV	

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0238	Reconductor Doubs – Dickerson and Doubs – Aqueduct 1200 MVA	As specified under the procedures detailed in Attachment H-18B, Section 1.b	BGE (16.66%) / Dominion (33.66%) / PEPCO (49.68%)
b0240	Open the Black Oak #3 500/138 kV transformer for the loss of Hatfield – Back Oak 500 kV line		APS (100%)
b0245	Replacement of the existing 954 ACSR conductor on the Bedington – Nipetown 138 kV line with high temperature/low sag conductor		APS (100%)
b0246	Rebuild of the Double Tollgate – Old Chapel 138 kV line with 954 ACSR conductor	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)
b0273	Open both North Shenandoah #3 transformer and Strasburg – Edinburgh 138 kV line for the loss of Mount Storm – Meadowbrook 572 500 kV		APS (100%)
b0322	Convert Lime Kiln substation to 230 kV operation		APS (100%)
b0323	Replace the North Shenandoah 138/115 kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)

\* Neptune Regional Transmission System, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.2	Build new Meadow Brook – Loudoun 500 kV circuit (20 of 50 miles)	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0343	Replace Doubs 500/230 kV transformer #2	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0344	Replace Doubs 500/230 kV transformer #3	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0345	Replace Doubs 500/230 kV transformer #4	As specified under the procedures detailed in Attachment H-18B, Section 1.b

**Load-Ratio Share Allocation:**  
AEC (1.66%) / AEP (14.16%) /  
APS (5.73%) / ATSI (7.88%) /  
BGE (4.22%) / ComEd (13.31%)  
/ Dayton (2.11%) / DEOK  
(3.29%) / DL (1.75%) / DPL  
(2.50%) / Dominion (12.86%) /  
EKPC (1.87%) / JCPL (3.74%) /  
ME (1.90%) / NEPTUNE\*  
(0.44%) / PECO (5.34%) /  
PENELEC (1.89%) / PEPCO  
(3.99%) / PPL (4.84%) / PSEG  
(6.26%) / RE (0.26%)

**DFAX Allocation:**  
Dominion (100%)

AEC (1.85%) / BGE (21.49%) /  
DPL (3.91%) / Dominion  
(28.86%) / ME (2.97%) / PECO  
(5.73%) / PEPCO (35.19%)

AEC (1.86%) / BGE (21.50%) /  
DPL (3.91%) / Dominion  
(28.82%) / ME (2.97%) / PECO  
(5.74%) / PEPCO (35.20%)

AEC (1.85%) / BGE (21.49%) /  
DPL (3.90%) / Dominion  
(28.83%) / ME (2.98%) / PECO  
(5.75%) / PEPCO (35.20%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.1	Build new Mt. Storm – 502 Junction 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.2	Build new Mt. Storm – Meadow Brook 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.3	Build new 502 Junction 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.4	Upgrade Meadow Brook 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.5	Replace Harrison 500 kV breaker HL-3	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>
b0347.6	Upgrade (per ABB inspection) breaker HL-6	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.7	Upgrade (per ABB inspection) breaker HL-7	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>
b0347.8	Upgrade (per ABB inspection) breaker HL-8	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.9	Upgrade (per ABB inspection) breaker HL-10	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>
b0347.10	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-1	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.11	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-3	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>
b0347.12	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-4	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.13	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-6	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>
b0347.14	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-7	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.15	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-9	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>
b0347.16	Upgrade (per ABB inspection) Harrison 500 kV breaker 'HL-3'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (74.10%) / PEPCO (25.90%)</u>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.17	Replace Meadow Brook 138 kV breaker 'MD-10'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>
b0347.18	Replace Meadow Brook 138 kV breaker 'MD-11'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.19	Replace Meadow Brook 138 kV breaker 'MD-12'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>
b0347.20	Replace Meadow Brook 138 kV breaker 'MD-13'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.21	Replace Meadow Brook 138 kV breaker 'MD-14'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>
b0347.22	Replace Meadow Brook 138 kV breaker 'MD-15'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>

\*Neptune Regional Transmission System, LLC



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.23	Replace Meadow Brook 138 kV breaker 'MD-16'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>
b0347.24	Replace Meadow Brook 138 kV breaker 'MD-17'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.25	Replace Meadow Brook 138 kV breaker 'MD-18'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>
b0347.26	Replace Meadow Brook 138 kV breaker 'MD-22#1 CAP'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.27	Replace Meadow Brook 138 kV breaker 'MD-4'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>
b0347.28	Replace Meadow Brook 138 kV breaker 'MD-5'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

**Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)**

b0347.29	Replace Meadowbrook 138 kV breaker 'MD-6'		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (33.78%) / Dominion (57.67%)</u>  <u>/ PEPCO (8.55%)</u></p>
b0347.30	Replace Meadowbrook 138 kV breaker 'MD-7'		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (33.78%) / Dominion (57.67%)</u>  <u>/ PEPCO (8.55%)</u></p>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.31	Replace Meadowbrook 138 kV breaker 'MD-8'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>
b0347.32	Replace Meadowbrook 138 kV breaker 'MD-9'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0347.33	Replace Meadow Brook 138kV breaker 'MD-1'		APS (100%)
b0347.34	Replace Meadow Brook 138kV breaker 'MD-2'		APS (100%)
b0348	Upgrade Stonewall – Inwood 138 kV with 954 ACSR conductor		APS (100%)
b0373	Convert Doubs – Monocacy 138 kV facilities to 230 kV operation		AEC (1.82%) / APS (76.84%) / DPL (2.64%) / JCPL (4.53%) / ME (9.15%) / Neptune* (0.42%) / PPL (4.60%)
b0393	Replace terminal equipment at Harrison 500 kV and Belmont 500 kV		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b><u>DFAX Allocation:</u></b> <u>ATSI (35.12%) / Dayton (22.04%) / DEOK (36.72%) / EKPC (6.12%)</u>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0406.1	Replace Mitchell 138 kV breaker “#4 bank”		APS (100%)
b0406.2	Replace Mitchell 138 kV breaker “#5 bank”		APS (100%)
b0406.3	Replace Mitchell 138 kV breaker “#2 transf”		APS (100%)
b0406.4	Replace Mitchell 138 kV breaker “#3 bank”		APS (100%)
b0406.5	Replace Mitchell 138 kV breaker “Charlerio #2”		APS (100%)
b0406.6	Replace Mitchell 138 kV breaker “Charlerio #1”		APS (100%)
b0406.7	Replace Mitchell 138 kV breaker “Shepler Hill Jct”		APS (100%)
b0406.8	Replace Mitchell 138 kV breaker “Union Jct”		APS (100%)
b0406.9	Replace Mitchell 138 kV breaker “#1-2 138 kV bus tie”		APS (100%)
b0407.1	Replace Marlowe 138 kV breaker “#1 transf”		APS (100%)
b0407.2	Replace Marlowe 138 kV breaker “MBO”		APS (100%)
b0407.3	Replace Marlowe 138 kV breaker “BMA”		APS (100%)
b0407.4	Replace Marlowe 138 kV breaker “BMR”		APS (100%)
b0407.5	Replace Marlowe 138 kV breaker “WC-1”		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0407.6	Replace Marlowe 138 kV breaker “R11”		APS (100%)
b0407.7	Replace Marlowe 138 kV breaker “W”		APS (100%)
b0407.8	Replace Marlowe 138 kV breaker “138 kV bus tie”		APS (100%)
b0408.1	Replace Trissler 138 kV breaker “Belmont 604”		APS (100%)
b0408.2	Replace Trissler 138 kV breaker “Edgelawn 90”		APS (100%)
b0409.1	Replace Weirton 138 kV breaker “Wylie Ridge 210”		APS (100%)
b0409.2	Replace Weirton 138 kV breaker “Wylie Ridge 216”		APS (100%)
b0410	Replace Glen Falls 138 kV breaker “McAlpin 30”		APS (100%)
b0417	Reconductor Mitchell – Shepler Hill Junction 138kV with 954 ACSR		APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0418	Install a breaker failure auto-restoration scheme at Cabot 500 kV for the failure of the #6 breaker	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0419	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers	<u><b>Load-Ratio Share Allocation:</b></u> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<u><b>DFAX Allocation:</b></u> <u><b>APS (100%)</b></u>
b0420	Operating Procedure to open the Black Oak 500/138 kV transformer #3 for the loss of Hatfield – Ronco 500 kV and the Hatfield #3 Generation	APS (100%)
b0445	Upgrade substation equipment and reconductor the Tidd – Mahans Lane – Weirton 138kV circuit with 954 ACSR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0460 Raise limiting structures on Albright – Bethelboro 138 kV to raise the rating to 175 MVA normal 214 MVA emergency		APS (100%)
b0491 Construct an Amos to Welton Spring to WV state line 765 kV circuit (APS equipment)	As specified under the procedures detailed in Attachment H-19B	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492	Construct a Welton Spring to Kemptown 765 kV line (APS equipment)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>
b0492.3	Replace Eastalco 230 kV breaker D-26	APS (100%)
b0492.4	Replace Eastalco 230 kV breaker D-28	APS (100%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.5	Replace Eastalco 230 kV breaker D-31	APS (100%)
b0495	Replace existing Kammer 765/500 kV transformer with a new larger transformer	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (5.93%) / BGE (37.30%) / Dayton (5.03%) / DEOK (6.72%) / EKPC (1.12%) / PEPCO (43.90%)</u></p>
b0533	Reconductor the Powell Mountain – Sutton 138 kV line	APS (100%)
b0534	Install a 28.61 MVAR capacitor on Sutton 138 kV	APS (100%)
b0535	Install a 44 MVAR capacitor on Dutch Fork 138 kV	APS (100%)
b0536	Replace Doubs circuit breaker DJ1	APS (100%)
b0537	Replace Doubs circuit breaker DJ7	APS (100%)
b0538	Replace Doubs circuit breaker DJ10	APS (100%)
b0572.1	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0572.2	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)
b0573	Reconfigure circuits in Butler – Cabot 138 kV area	APS (100%)
b0577	Replace Fort Martin 500 kV breaker FL-1	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (100%)</u>
b0584	Install 33 MVAR 138 kV capacitor at Necessity 138 kV	APS (100%)
b0585	Increase Cecil 138 kV capacitor size to 44 MVAR, replace five 138 kV breakers at Cecil due to increased short circuit fault duty as a result of the addition of the Prexy substation	APS (100%)
b0586	Increase Whiteley 138 kV capacitor size to 44 MVAR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0587	Reconductor AP portion of Tidd – Carnegie 138 kV and Carnegie – Weirton 138 kV with 954 ACSR	APS (100%)
b0588	Install a 40.8 MVAR 138 kV capacitor at Grassy Falls	APS (100%)
b0589	Replace five 138 kV breakers at Cecil	APS (100%)
b0590	Replace #1 and #2 breakers at Charleroi 138 kV	APS (100%)
b0591	Install a 25.2 MVAR capacitor at Seneca Caverns 138 kV	APS (100%)
b0673	Rebuild Elko – Carbon Center Junction using 230 kV construction	APS (100%)
b0674	Construct new Osage – Whiteley 138 kV circuit	APS (97.69%) / DL (0.96%) / PENELEC (1.09%) / PSEG (0.25%) / RE (0.01%)
b0674.1	Replace the Osage 138 kV breaker ‘CollinsF126’	APS (100%)
b0675.1	Convert Monocacy - Walkersville 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.2	Convert Walkersville - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.3	Convert Ringgold - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.4	Convert Catoctin - Carroll 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.5	Convert portion of Ringgold Substation from 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.6	Convert Catoctin Substation from 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.7	Convert portion of Carroll Substation from 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.8	Convert Monocacy Substation from 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.9	Convert Walkersville Substation from 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0676.1	Reconductor Doubs - Lime Kiln (#207) 230kV	AEC (0.64%) / APS (86.77%) / DPL (0.53%) / JCPL (1.93%) / ME (4.05%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%)
b0676.2	Reconductor Doubs - Lime Kiln (#231) 230kV	AEC (0.64%) / APS (86.77%) / DPL (0.53%) / JCPL (1.93%) / ME (4.05%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%)
b0677	Reconductor Double Toll Gate – Riverton with 954 ACSR	APS (100%)
b0678	Reconductor Glen Falls - Oak Mound 138kV with 954 ACSR	APS (100%)
b0679	Reconductor Grand Point – Letterkenny with 954 ACSR	APS (100%)
b0680	Reconductor Greene – Letterkenny with 954 ACSR	APS (100%)
b0681	Replace 600/5 CT's at Franklin 138 kV	APS (100%)
b0682	Replace 600/5 CT's at Whiteley 138 kV	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0684	Reconductor Guilford – South Chambersburg with 954 ACSR	APS (100%)
b0685	Replace Ringgold 230/138 kV #3 with larger transformer	APS (72.06%) / JCPL (4.18%) / ME (6.80%) / NEPTUNE* (0.38%) / PECO (4.06%) / PENELEC (5.89%) / PSEG (6.38%) / RE (0.25%)
b0704	Install a third Cabot 500/138 kV transformer	APS (74.36%) / DL (2.73%) PENELEC (22.91%)
b0797	Advance n0321 (Replace Doubs Circuit Breaker DJ2)	APS(100%)
b0798	Advance n0322 (Replace Doubs Circuit Breaker DJ3)	APS(100%)
b0799	Advance n0323 (Replace Doubs Circuit Breaker DJ6)	APS(100%)
b0800	Advance n0327 (Replace Doubs Circuit Breaker DJ16)	APS(100%)
b0941	Replace Opequon 138 kV breaker 'BUSTIE'	APS(100%)
b0942	Replace Butler 138 kV breaker '#1 BANK'	APS(100%)
b0943	Replace Butler 138 kV breaker '#2 BANK'	APS(100%)
b0944	Replace Yukon 138 kV breaker 'Y-8'	APS(100%)
b0945	Replace Yukon 138 kV breaker 'Y-3'	APS(100%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0946	Replace Yukon 138 kV breaker 'Y-1'		APS(100%)
b0947	Replace Yukon 138 kV breaker 'Y-5'		APS(100%)
b0948	Replace Yukon 138 kV breaker 'Y-2'		APS(100%)
b0949	Replace Yukon 138 kV breaker 'Y-19'		APS(100%)
b0950	Replace Yukon 138 kV breaker 'Y-4'		APS(100%)
b0951	Replace Yukon 138 kV breaker 'Y-9'		APS(100%)
b0952	Replace Yukon 138 kV breaker 'Y-11'		APS(100%)
b0953	Replace Yukon 138 kV breaker 'Y-13'		APS(100%)
b0954	Replace Charleroi 138 kV breaker '#1 XFMR BANK'		APS(100%)
b0955	Replace Yukon 138 kV breaker 'Y-7'		APS(100%)
b0956	Replace Pruntytown 138 kV breaker 'P-9'		APS(100%)
b0957	Replace Pruntytown 138 kV breaker 'P-12'		APS(100%)
b0958	Replace Pruntytown 138 kV breaker 'P-15'		APS(100%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0959 Replace Charleroi 138 kV breaker '#2 XFMR BANK'		APS(100%)
b0960 Replace Pruntytown 138 kV breaker 'P-2'		APS(100%)
b0961 Replace Pruntytown 138 kV breaker 'P-5'		APS(100%)
b0962 Replace Yukon 138 kV breaker 'Y-18'		APS(100%)
b0963 Replace Yukon 138 kV breaker 'Y-10'		APS(100%)
b0964 Replace Pruntytown 138 kV breaker 'P-11'		APS(100%)
b0965 Replace Springdale 138 kV breaker '138E'		APS(100%)
b0966 Replace Pruntytown 138 kV breaker 'P-8'		APS(100%)
b0967 Replace Pruntytown 138 kV breaker 'P-14'		APS(100%)
b0968 Replace Ringgold 138 kV breaker '#3 XFMR BANK'		APS(100%)
b0969 Replace Springdale 138 kV breaker '138C'		APS(100%)
b0970 Replace Rivesville 138 kV breaker '#8 XFMR BANK'		APS(100%)
b0971 Replace Springdale 138 kV breaker '138F'		APS(100%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0972	Replace Belmont 138 kV breaker 'B-16'		APS(100%)
b0973	Replace Springdale 138 kV breaker '138G'		APS(100%)
b0974	Replace Springdale 138 kV breaker '138V'		APS(100%)
b0975	Replace Armstrong 138 kV breaker 'BROOKVILLE'		APS(100%)
b0976	Replace Springdale 138 kV breaker '138P'		APS(100%)
b0977	Replace Belmont 138 kV breaker 'B-17'		APS(100%)
b0978	Replace Springdale 138 kV breaker '138U'		APS(100%)
b0979	Replace Springdale 138 kV breaker '138D'		APS(100%)
b0980	Replace Springdale 138 kV breaker '138R'		APS(100%)
b0981	Replace Yukon 138 kV breaker 'Y-12'		APS(100%)
b0982	Replace Yukon 138 kV breaker 'Y-17'		APS(100%)
b0983	Replace Yukon 138 kV breaker 'Y-14'		APS(100%)
b0984	Replace Rivesville 138 kV breaker '#10 XFMR BANK'		APS(100%)
b0985	Replace Belmont 138 kV breaker 'B-14'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0986	Replace Armstrong 138 kV breaker 'RESERVE BUS'		APS(100%)
b0987	Replace Yukon 138 kV breaker 'Y-16'		APS(100%)
b0988	Replace Springdale 138 kV breaker '138T'		APS(100%)
b0989	Replace Edgelawn 138 kV breaker 'GOFF RUN #632'		APS(100%)
b0990	Change reclosing on Cabot 138 kV breaker 'C-9'		APS(100%)
b0991	Change reclosing on Belmont 138 kV breaker 'B-7'		APS(100%)
b0992	Change reclosing on Belmont 138 kV breaker 'B-12'		APS(100%)
b0993	Change reclosing on Belmont 138 kV breaker 'B-9'		APS(100%)
b0994	Change reclosing on Belmont 138 kV breaker 'B-19'		APS(100%)
b0995	Change reclosing on Belmont 138 kV breaker 'B-21'		APS(100%)
b0996	Change reclosing on Willow Island 138 kV breaker 'FAIRVIEW #84'		APS(100%)
b0997	Change reclosing on Cabot 138 kV breaker 'C-4'		APS(100%)
b0998	Change reclosing on Cabot 138 kV breaker 'C-1'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0999	Replace Redbud 138 kV breaker 'BUS TIE'		APS(100%)
b1022.1	Reconfigure the Peters to Bethel Park 138 kV line and Elrama to Woodville 138 kV line to create a 138 kV path from Woodville to Peters and a 138 kV path from Elrama to Bethel Park		APS (96.98%) / DL (3.02%)
b1022.3	Add static capacitors at Smith 138 kV		APS (96.98%) / DL (3.02%)
b1022.4	Add static capacitors at North Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.5	Add static capacitors at South Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.6	Add static capacitors at Manifold 138 kV		APS (96.98%) / DL (3.02%)
b1022.7	Add static capacitors at Houston 138 kV		APS (96.98%) / DL (3.02%)
b1023.1	Install a 500/138 kV transformer at 502 Junction		APS (100%)
b1023.2	Construct a new Franklin - 502 Junction 138 kV line including a rebuild of the Whiteley - Franklin 138 kV line to double circuit		APS (100%)
b1023.3	Construct a new 502 Junction - Osage 138 kV line		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1023.4	Construct Braddock 138 kV breaker station that connects the Charleroi - Gordon 138 kV line, Washington - Franklin 138 kV line and the Washington - Vanceville 138 kV line including a 66 MVAR capacitor	APS (100%)
b1027	Increase the size of the shunt capacitors at Enon 138 kV	APS (100%)
b1028	Raise three structures on the Osage - Collins Ferry 138 kV line to increase the line rating	APS (100%)
b1128	Reconductor the Edgewater – Vasco Tap; Edgewater – Loyalhanna 138 kV lines with 954 ACSR	APS (100%)
b1129	Reconductor the East Waynesboro – Ringgold 138 kV line with 954 ACSR	APS (100%)
b1131	Upgrade Double Tollgate – Meadowbrook MDT Terminal Equipment	APS (100%)
b1132	Upgrade Double Tollgate-Meadowbrook MBG terminal equipment	APS (100%)
b1133	Upgrade terminal equipment at Springdale	APS (100%)
b1135	Reconductor the Bartonville – Meadowbrook 138 kV line with high temperature conductor	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1137	Reconductor the Eastgate – Luxor 138 kV; Eastgate – Sony 138 kV line with 954 ACSR	APS (78.77%) / PENELEC (14.11%) / PSEG (6.85%) / RE (0.27%)
b1138	Reconductor the King Farm – Sony 138 kV line with 954 ACSR	APS (100%)
b1139	Reconductor the Yukon – Waltz Mills 138 kV line with high temperature conductor	APS (100%)
b1140	Reconductor the Bracken Junction – Luxor 138 kV line with 954 ACSR	APS (100%)
b1141	Reconductor the Sewickley – Waltz Mills Tap 138 kV line with high temperature conductor	APS (100%)
b1142	Reconductor the Bartonsville – Stephenson 138 kV; Stonewall – Stephenson 138 kV line with 954 ACSR	APS (100%)
b1143	Reconductor the Youngwood – Yukon 138 kV line with high temperature conductor	APS (89.92%) / PENELEC (10.08%)
b1144	Reconductor the Bull Creek Junction – Cabot 138 kV line with high temperature conductor	APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1145	Reconductor the Lawson Junction – Cabot 138 kV line with high temperature conductor	APS (100%)
b1146	Replace Layton - Smithton #61 138 kV line structures to increase line rating	APS (100%)
b1147	Replace Smith – Yukon 138 kV line structures to increase line rating	APS (100%)
b1148	Reconductor the Loyalhanna – Luxor 138 kV line with 954 ACSR	APS (100%)
b1149	Reconductor the Luxor – Stony Springs Junction 138 kV line with 954 ACSR	APS (100%)
b1150	Upgrade terminal equipment at Social Hall	APS (100%)
b1151	Reconductor the Greenwood – Redbud 138 kV line with 954 ACSR	APS (100%)
b1152	Reconductor Grand Point – South Chambersburg	APS (100%)
b1159	Replace Peters 138 kV breaker ‘Bethel P OCB’	APS (100%)
b1160	Replace Peters 138 kV breaker ‘Cecil OCB’	APS (100%)
b1161	Replace Peters 138 kV breaker ‘Union JctOCB’	APS (100%)
b1162	Replace Double Toll Gate 138 kV breaker ‘DRB-2’	APS (100%)
b1163	Replace Double Toll Gate 138 kV breaker ‘DT 138 kV OCB’	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1164	Replace Cecil 138 kV breaker 'Enlow OCB'	APS (100%)
b1165	Replace Cecil 138 kV breaker 'South Fayette'	APS (100%)
b1166	Replace Wylie Ridge 138 kV breaker 'W-9'	APS (100%)
b1167	Replace Reid 138 kV breaker 'RI-2'	APS (100%)
b1171.1	Install the second Black Oak 500/138 kV transformer, two 138 kV breaker, and related substation work	BGE (20.76%) / DPL (3.14%) / Dominion (39.55%) / ME (2.71%) / PECO (3.36%) / PEPCO (30.48%)
b1171.3	Install six 500 kV breakers and remove BOL1 500 kV breaker at Black Oak	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b1200	Reconductor Double Toll Gate – Greenwood 138 kV with 954 ACSR conductor	APS (100%)
b1221.1	Convert Carbon Center from 138 kV to a 230 kV ring bus	APS (100%)
b1221.2	Construct Bear Run 230 kV substation with 230/138 kV transformer	APS (100%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1221.3	Loop Carbon Center Junction – Williamette line into Bear Run	APS (100%)
b1221.4	Carbon Center – Carbon Center Junction & Carbon Center Junction – Bear Run conversion from 138 kV to 230 kV	APS (100%)
b1230	Reconductor Willow-Eureka & Eureka-St Mary 138 kV lines	APS (100%)
b1232	Reconductor Nipetown – Reid 138 kV with 1033 ACCR	AEC (1.40%) / APS (75.74%) / DPL (1.92%) / JCPL (2.92%) / ME (6.10%) / Neptune (0.27%) / PECO (4.40%) / PENELEC (3.26%) / PPL (3.99%)
b1233.1	Upgrade terminal equipment at Washington	APS (100%)
b1234	Replace structures between Ridgeway and Paper city	APS (100%)
b1235	Reconductor the Albright – Black Oak AFA 138 kV line with 795 ACSS/TW	APS (30.25%) / BGE (16.10%) / Dominion (30.51%) / PEPCO (23.14%)
b1237	Upgrade terminal equipment at Albright, replace bus and line side breaker disconnects and leads, replace breaker risers, upgrade RTU and line	APS (100%)
b1238	Install a 138 kV 44 MVAR capacitor at Edgelawn substation	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1239	Install a 138 kV 44 MVAR capacitor at Ridgeway substation	APS (100%)
b1240	Install a 138 kV 44 MVAR capacitor at Elko Substation	APS (100%)
b1241	Upgrade terminal equipment at Washington substation on the GE Plastics/DuPont terminal	APS (100%)
b1242	Replace structures between Collins Ferry and West Run	APS (100%)
b1243	Install a 138 kV capacitor at Potter Substation	APS (100%)
b1261	Replace Butler 138 kV breaker '1-2 BUS 138'	APS (100%)
b1383	Install 2nd 500/138 kV transformer at 502 Junction	APS (93.27%) / DL (5.39%) / PENELEC (1.34%)
b1384	Reconductor approximately 2.17 miles of Bedington – Shepherdstown 138 kV with 954 ACSR	APS (100%)
b1385	Reconductor Halfway – Paramount 138 kV with 1033 ACCR	APS (100%)
b1386	Reconductor Double Tollgate – Meadow Brook 138 kV ckt 2 with 1033 ACCR	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1387	Reconductor Double Tollgate – Meadow Brook 138 kV	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1388	Reconductor Feagans Mill – Millville 138 kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1389	Reconductor Bens Run – St. Mary’s 138 kV with 954 ACSR		AEP (12.40%) / APS (17.80%) / DL (69.80%)
b1390	Replace Bus Tie Breaker at Opequon		APS (100%)
b1391	Replace Line Trap at Gore		APS (100%)
b1392	Replace structure on Belmont – Trissler 138 kV line		APS (100%)
b1393	Replace structures Kingwood – Pruntytown 138 kV line		APS (100%)
b1395	Upgrade Terminal Equipment at Kittanning		APS (100%)
b1401	Change reclosing on Pruntytown 138 kV breaker ‘P-16’ to 1 shot at 15 seconds		APS (100%)
b1402	Change reclosing on Rivesville 138 kV breaker ‘Pruntytown #34’ to 1 shot at 15 seconds		APS (100%)
b1403	Change reclosing on Yukon 138 kV breaker ‘Y21 Shepler’ to 1 shot at 15 seconds		APS (100%)
b1404	Replace the Kiski Valley 138 kV breaker ‘Vandergrift’ with a 40 kA breaker		APS (100%)
b1405	Change reclosing on Armstrong 138 kV breaker ‘GARETTRJCT’ at 1 shot at 15 seconds		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1406	Change reclosing on Armstrong 138 kV breaker 'KITTANNING' to 1 shot at 15 seconds		APS (100%)
b1407	Change reclosing on Armstrong 138 kV breaker 'BURMA' to 1 shot at 15 seconds		APS (100%)
b1408	Replace the Weirton 138 kV breaker 'Tidd 224' with a 40 kA breaker		APS (100%)
b1409	Replace the Cabot 138 kV breaker 'C9 Kiski Valley' with a 40 kA breaker		APS (100%)
b1507.2	Terminal Equipment upgrade at Doubs substation		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b><u>DFAX Allocation:</u></b> <u>APS (25.20%) / BGE (10.49%) / Dominion (52.48%) / PEPCO (11.83%)</u>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1507.3	Mt. Storm – Doubs transmission line rebuild in Maryland – Total line mileage for APS is 2.71 miles	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (25.20%) / BGE (10.49%) / Dominion (52.48%) / PEPCO (11.83%)</u></p>
b1510	Install 59.4 MVAR capacitor at Waverly	APS (100%)
b1672	Install a 230 kV breaker at Carbon Center	APS (100%)
b0539	Replace Doubs circuit breaker DJ11	APS (100%)
b0540	Replace Doubs circuit breaker DJ12	APS (100%)
b0541	Replace Doubs circuit breaker DJ13	APS (100%)
b0542	Replace Doubs circuit breaker DJ20	APS (100%)
b0543	Replace Doubs circuit breaker DJ21	APS (100%)
b0544	Remove instantaneous reclose from Eastalco circuit breaker D-26	APS (100%)

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0545	Remove instantaneous reclose from Eastalco circuit breaker D-28		APS (100%)
b0559	Install 200 MVAR capacitor at Meadow Brook 500 kV substation		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>
b0560	Install 250 MVAR capacitor at Kemptown 500 kV substation		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b><u>DFAX Allocation:</u></b> <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u>

\* Neptune Regional Transmission System, LLC



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1803	Build a 300 MVAR Switched Shunt at Doubs 500 kV and increase (~50 MVAR) in size the existing Switched Shunt at Doubs 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (25.20%) / BGE (10.49%) / Dominion (52.48%) / PEPCO (11.83%)</u></p>
b1804	Install a new 600 MVAR SVC at Meadowbrook 500kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u></p>
b1816.1	Replace relaying at the Mt. Airy substation on the Carroll - Mt. Airy 230 kV line	APS (100%)

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1816.2	Adjust the control settings of all existing capacitors at Mt Airy 34.5kV, Monocacy 138kV, Ringgold 138kV served by Potomac Edison's Eastern 230 kV network to ensure that all units will be on during the identified N-1-1 contingencies		APS (100%)
b1816.3	Replace existing unidirectional LTC controller on the No. 4, 230/138 kV transformer at Carroll substation with a bidirectional unit		APS (100%)
b1816.4	Isolate and bypass the 138 kV reactor at Germantown Substation		APS (100%)
b1816.6	Replace 336.4 ACSR conductor on the Catocin - Carroll 138 kV line using 556.5 ACSR (26/7) or equivalent on existing structures (12.7 miles), 800 A wave traps at Carroll and Catocin with 1200 A units, and 556.5 ACSR SCCIR (Sub-conductor) line risers and bus traps with 795 ACSR or equivalent		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1822	Replace the 1200 A wave trap, line risers, breaker risers with 1600 A capacity terminal equipment at Reid 138 kV SS	APS (100%)
b1823	Replace the 800 A wave trap with a 1200 A wave trap at Millville 138 kV substation	APS (100%)
b1824	Reconductor Grant Point - Guilford 138kV line approximately 8 miles of 556 ACSR with 795 ACSR	APS (100%)
b1825	Replace the 800 Amp line trap at Butler 138 kV Sub on the Cabot East 138 kV line	APS (100%)
b1826	Change the CT ratio at Double Toll Gate 138 kV SS on MDT line	APS (100%)
b1827	Change the CT ratio at Double Toll Gate 138 kV SS on MBG line	APS (100%)
b1828.1	Reconductor the Bartonville – Stephenson 3.03 mile 138 kV line of 556 ACSR with 795 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1828.2	Reconductor the Stonewall – Stephenson 2.08 mile 138 kV line of 556 ACSR with 795 ACSR	APS (100%)
b1829	Replace the existing 138 kV 556.5 ACSR substation conductor risers with 954 ACSR at the Redbud 138 kV substation, including but not limited to the line side disconnect leads	APS (100%)
b1830	Replace 1200 A wave trap and 1024 ACAR breaker risers at Halfway 138 kV substation, and replace 1024 ACAR breaker risers at Paramount 138 kV substation	APS (100%)
b1832	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 1 (207) 230 kV line terminal	APS (100%)
b1833	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 2 (231) 230 kV line terminal	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1835	Reconductor 14.3 miles of 556 ACSR with 795 ACSR from Old Chapel to Millville 138 kV and upgrade line risers at Old Chapel 138 kV and Millville 138 kV and replace 1200 A wave trap at Millville 138 kV	APS (37.68%) / Dominion (34.46%) / PEPCO (13.69%) / BGE (11.45%) / ME (2.01%) / PENELEC (0.53%) / DL (0.18%)
b1836	Replace 1200 A wave trap with 1600 A wave trap at Reid 138 kV SS	APS (100%)
b1837	Replace 750 CU breaker risers with 795 ACSR at Marlowe 138 kV and replace 1200 A wave traps with 1600 A wave traps at Marlowe 138 kV and Bedington 138 kV	APS (100%)
b1838	Replace the 1200 A Bedington 138 kV line air switch and the 1200 A 138 kV bus tie air switch at Nipetown 138 kV with 1600 A switches	APS (100%)
b1839	Install additional 33 MVAR capacitors at Grand Point 138 kV SS and Guildford 138 kV SS	APS (100%)

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1840	Construct a 138 kV line between Buckhannon and Weston 138 kV substations	APS (100%)
b1902	Replace line trap at Stonewall on the Stephenson 138 kV line terminal	APS (100%)
b1941	Loop the Homer City-Handsome Lake 345 kV line into the Armstrong substation and install a 345/138 kV transformer at Armstrong	APS (67.86%) / PENELEC (32.14%)
b1942	Change the CT ratio at Millville to improve the Millville – Old Chapel 138 kV line ratings	APS (100%)
b1964	Convert Moshannon substation to a 4 breaker 230 kV ring bus	APS (41.06%) / DPL (6.68%) / JCPL (5.48%) / ME (10.70%) / Neptune* (0.53%) / PECO (15.53%) / PPL (20.02%)
b1965	Install a 44 MVAR 138 kV capacitor at Luxor substation	APS (100%)
b1986	Upgrade the AP portion of the Elrama – Mitchell 138 kV line by replace breaker risers on the Mitchell 138 kV bus on the Elrama terminal	APS (100%)
b1987	Reconductor the Osage-Collins Ferry 138 kV line with 795 ACSS. Upgrade terminal equipment at Osage and Collins Ferry	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1988	Raise structures between Lake Lynn and West Run to eliminate the clearance de-rates on the West Run – Lake Lynn 138 kV line	APS (100%)
b1989	Raise structures between Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line	APS (100%)
b2095	Replace Weirt 138 kV breaker 'S-TORONTO226' with 63kA rated breaker	APS (100%)
b2096	Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'	APS (100%)
b2097	Replace Ridgeley 138 kV breaker '#2 XFMR OCB'	APS (100%)
b2098	Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker	APS (100%)
b2099	Revise the reclosing of Ridgeley 138 kV breaker 'RC1'	APS (100%)
b2100	Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker	APS (100%)
b2101	Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker	APS (100%)
b2102	Replace Armstrong 138 kV breaker 'GARETTRJCT' with 40kA rated breaker	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2103	Replace Armstrong 138 kV breaker 'BURMA' with 40kA rated breaker		APS (100%)
b2104	Replace Armstrong 138 kV breaker 'KITANNING' with 40kA rated breaker		APS (100%)
b2105	Replace Armstrong 138 kV breaker 'KISSINGERJCT' with 40kA rated breaker		APS (100%)
b2106	Replace Wylie Ridge 345 kV breaker 'WK-1' with 63kA rated breaker		APS (100%)
b2107	Replace Wylie Ridge 345 kV breaker 'WK-2' with 63kA rated breaker		APS (100%)
b2108	Replace Wylie Ridge 345 kV breaker 'WK-3' with 63kA rated breaker		APS (100%)
b2109	Replace Wylie Ridge 345 kV breaker 'WK-4' with 63kA rated breaker		APS (100%)
b2110	Replace Wylie Ridge 345 kV breaker 'WK-6' with 63kA rated breaker		APS (100%)
b2111	Replace Wylie Ridge 138 kV breaker 'WK-7' with 63kA rated breaker		APS (100%)
b2112	Replace Wylie Ridge 345 kV breaker 'WK-5'		APS (100%)
b2113	Replace Weirton 138 kV breaker 'NO 6 XFMR' with 63kA rated breaker		APS (100%)
b2114	Replace Armstrong 138 kV breaker 'Bus-Tie' (Status On-Hold pending retirement)		APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2124.1	Add a new 138 kV line exit		APS (100%)
b2124.2	Construct a 138 kV ring bus and install a 138/69 kV autotransformer		APS (100%)
b2124.3	Add new 138 kV line exit and install a 138/25 kV transformer		APS (100%)
b2124.4	Construct approximately 5.5 miles of 138 kV line		APS (100%)
b2124.5	Convert approximately 7.5 miles of 69 kV to 138 kV		APS (100%)
b2156	Install a 75 MVAR 230 kV capacitor at Shingletown Substation		APS (100%)
b2165	Replace 800A wave trap at Stonewall with a 1200 A wave trap		APS (100%)
b2166	Reconductor the Millville – Sleepy Hollow 138kV 4.25 miles of 556 ACSR with 795 ACSR, upgrade line risers at Sleepy Hollow, and change 1200 A CT tap at Millville to 800		APS (100%)
b2168	For Grassy Falls 138kV Capacitor bank adjust turn-on voltage to 1.0pu with a high limit of 1.04pu, For Crupperneck and Powell Mountain 138kV Capacitor Banks adjust turn-on voltage to 1.01pu with a high limit of 1.035pu		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2169	Replace/Raise structures on the Yukon-Smithton 138 kV line section to eliminate clearance de-rate	APS (100%)
b2170	Replace/Raise structures on the Smithton-Shepler Hill Jct 138 kV line section to eliminate clearance de-rate	APS (100%)
b2171	Replace/Raise structures on the Parsons-William 138 kV line section to eliminate clearance de-rate	APS (100%)
b2172	Replace/Raise structures on the Parsons - Loughs Lane 138 kV line section to eliminate clearance de-rate	APS (100%)

## SCHEDULE 12 – APPENDIX

- (17) **AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0318	Install a 765/138 kV transformer at Amos	AEP (99.00%) / PEPCO (1.00%)
b0324	Replace entrance conductors, wave traps, and risers at the Tidd 345 kV station on the Tidd – Canton Central 345 kV circuit	AEP (100%)
b0447	Replace Cook 345 kV breaker M2	AEP (100%)
b0448	Replace Cook 345 kV breaker N2	AEP (100%)
b0490	Construct an Amos – Bedington 765 kV circuit (AEP equipment)	As specified under the procedures detailed in Attachment H-19B
		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) /</u>  <u>APS (9.26%) / BGE (4.43%) /</u>  <u>DL (0.02%) / DPL (6.91%) /</u>  <u>Dominion (10.82%) / JCPL</u>  <u>(11.64%) / ME (2.94%) /</u>  <u>NEPTUNE (1.12%) / PECO</u>  <u>(14.51%) / PEPCO (6.11%) /</u>  <u>PPL (6.39%) / PSEG (15.86%) /</u>  <u>RE (0.59%)</u></p>

\* Neptune Regional Transmission System, LLC

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.2	Replace Amos 138 kV breaker 'B'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>
b0490.3	Replace Amos 138 kV breaker 'B1'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.4	Replace Amos 138 kV breaker 'C'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u>
b0490.5	Replace Amos 138 kV breaker 'C1'	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.6	Replace Amos 138 kV breaker 'D'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>
b0490.7	Replace Amos 138 kV breaker 'D2'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.8	Replace Amos 138 kV breaker 'E'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>
b0490.9	Replace Amos 138 kV breaker 'E2'	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0504	Add two advanced technology circuit breakers at Hanging Rock 765 kV to improve operational performance		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEP (100%)</u></p>
b0570	Reconductor East Side Lima – Sterling 138 kV		AEP (41.99%) / ComEd (58.01%)
b0571	Reconductor West Millersport – Millersport 138 kV		AEP (73.83%) / ComEd (19.26%) / Dayton (6.91%)
b0748	Establish a new 69 kV circuit between the Canal Road and East Wooster stations, establish a new 69 kV circuit between the West Millersburg and Moreland Switch stations (via Shreve), add reactive support via cap banks		AEP (100%)
b0838	Hazard Area 138 kV and 69 kV Improvement Projects		AEP (100%)
b0839	Replace existing 450 MVA transformer at Twin Branch 345 / 138 kV with a 675 MVA transformer		AEP (99.73%) / Dayton (0.27%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0840	String a second 138 kV circuit on the open tower position between Twin Branch and East Elkhart	AEP (100%)
b0840.1	Establish a new 138/69-34.5kV Station to interconnect the existing 34.5kV network	AEP (100%)
b0917	Replace Baileysville 138 kV breaker 'P'	AEP (100%)
b0918	Replace Riverview 138 kV breaker '634'	AEP (100%)
b0919	Replace Torrey 138 kV breaker 'W'	AEP (100%)
b1032.1	Construct a new 345/138kV station on the Marquis-Bixby 345kV line near the intersection with Ross - Highland 69kV	AEP (89.97%) / Dayton (10.03%)
b1032.2	Construct two 138kV outlets to Delano 138kV station and to Camp Sherman station	AEP (89.97%) / Dayton (10.03%)
b1032.3	Convert Ross - Circleville 69kV to 138kV	AEP (89.97%) / Dayton (10.03%)
b1032.4	Install 138/69kV transformer at new station and connect in the Ross - Highland 69kV line	AEP (89.97%) / Dayton (10.03%)
b1033	Add a third delivery point from AEP's East Danville Station to the City of Danville.	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.1	Establish new South Canton - West Canton 138kV line (replacing Torrey - West Canton) and Wagenhals - Wayview 138kV	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.2	Loop the existing South Canton - Wayview 138kV circuit in-and-out of West Canton	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.3	Install a 345/138kV 450 MVA transformer at Canton Central	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.4	Rebuild/reconductor the Sunnyside - Torrey 138kV line	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.5	Disconnect/eliminate the West Canton 138kV terminal at Torrey Station	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.6	Replace all 138kV circuit breakers at South Canton Station and operate the station in a breaker and a half configuration	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.7	Replace all obsolete 138kV circuit breakers at the Torrey and Wagenhals stations	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.8	Install additional 138kV circuit breakers at the West Canton, South Canton, Canton Central, and Wagenhals stations to accommodate the new circuits	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1035	Establish a third 345kV breaker string in the West Millersport Station. Construct a new West Millersport – Gahanna 138kV circuit. Miscellaneous improvements to 138kV transmission system.	AEP (100%)
b1036	Upgrade terminal equipment at Poston Station and update remote end relays	AEP (100%)
b1037	Sag check Bonsack–Cloverdale 138 kV, Cloverdale–Centerville 138kV, Centerville–Ivy Hill 138kV, Ivy Hill–Reusens 138kV, Bonsack–Reusens 138kV and Reusens–Monel–Gomingo–Joshua Falls 138 kV.	AEP (100%)
b1038	Check the Crooksville - Muskingum 138 kV sag and perform the required work to improve the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1039	Perform a sag study for the Madison – Cross Street 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1040	Rebuild an 0.065 mile section of the New Carlisle – Olive 138 kV line and change the 138 kV line switches at New Carlisle	AEP (100%)
b1041	Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating	AEP (100%)
b1042	Perform sag studies to raise the emergency rating of Amos – Poca 138kV	AEP (100%)
b1043	Perform sag studies to raise the emergency rating of Turner - Ruth 138kV	AEP (100%)
b1044	Perform sag studies to raise the emergency rating of Kenova – South Point 138kV	AEP (100%)
b1045	Perform sag studies of Tri State - Darrah 138 kV	AEP (100%)
b1046	Perform sag study of Scottsville – Bremono 138kV to raise the emergency rating	AEP (100%)
b1047	Perform sag study of Otter Switch - Altavista 138kV to raise the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1048	Reconductor the Bixby - Three C - Groves and Bixby - Groves 138 kV tower line	AEP (100%)
b1049	Upgrade the risers at the Riverside station to increase the rating of Benton Harbor – Riverside 138kV	AEP (100%)
b1050	Rebuilding and reconductor the Bixby – Pickerington Road - West Lancaster 138 kV line	AEP (100%)
b1051	Perform a sag study for the Kenzie Creek – Pokagon 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1052	Unsix-wire the existing Hyatt - Sawmill 138 kV line to form two Hyatt - Sawmill 138 kV circuits	AEP (100%)
b1053	Perform a sag study and remediation of 32 miles between Claytor and Matt Funk.	AEP (100%)
b1091	Add 28.8 MVAR 138 kV capacitor bank at Huffman and 43.2 MVAR 138 kV Bank at Jubal Early and 52.8 MVAR 138 kV Bank at Progress Park Stations	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1092	Add 28.8 MVAR 138 kV capacitor bank at Sullivan Gardens and 52.8 MVAR 138 kV Bank at Reedy Creek Stations	AEP (100%)
b1093	Add a 43.2 MVAR capacitor bank at the Morgan Fork 138 kV Station	AEP (100%)
b1094	Add a 64.8 MVAR capacitor bank at the West Huntington 138 kV Station	AEP (100%)
b1108	Replace Ohio Central 138 kV breaker 'C2'	AEP (100%)
b1109	Replace Ohio Central 138 kV breaker 'D1'	AEP (100%)
b1110	Replace Sporn A 138 kV breaker 'J'	AEP (100%)
b1111	Replace Sporn A 138 kV breaker 'J2'	AEP (100%)
b1112	Replace Sporn A 138 kV breaker 'L'	AEP (100%)
b1113	Replace Sporn A 138 kV breaker 'L1'	AEP (100%)
b1114	Replace Sporn A 138 kV breaker 'L2'	AEP (100%)
b1115	Replace Sporn A 138 kV breaker 'N'	AEP (100%)
b1116	Replace Sporn A 138 kV breaker 'N2'	AEP (100%)
b1227	Perform a sag study on Altavista – Leesville 138 kV circuit	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1231	Replace the existing 138/69-12 kV transformer at West Moulton Station with a 138/69 kV transformer and a 69/12 kV transformer		AEP (96.69%) / Dayton (3.31%)
b1375	Replace Roanoke 138 kV breaker 'T'		AEP (100%)
b1376	Replace Roanoke 138 kV breaker 'E'		AEP (100%)
b1377	Replace Roanoke 138 kV breaker 'F'		AEP (100%)
b1378	Replace Roanoke 138 kV breaker 'G'		AEP (100%)
b1379	Replace Roanoke 138 kV breaker 'B'		AEP (100%)
b1380	Replace Roanoke 138 kV breaker 'A'		AEP (100%)
b1381	Replace Olive 345 kV breaker 'E'		AEP (100%)
b1382	Replace Olive 345 kV breaker 'R2'		AEP (100%)
b1416	Perform a sag study on the Desoto – Deer Creek 138 kV line to increase the emergency rating		AEP (100%)
b1417	Perform a sag study on the Delaware – Madison 138 kV line to increase the emergency rating		AEP (100%)
b1418	Perform a sag study on the Rockhill – East Lima 138 kV line to increase the emergency rating		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1419 Perform a sag study on the Findlay Center – Fostoria Ctl 138 kV line to increase the emergency rating		AEP (100%)
b1420 A sag study will be required to increase the emergency rating for this line. Depending on the outcome of this study, more action may be required in order to increase the rating		AEP (100%)
b1421 Perform a sag study on the Sorenson – McKinley 138 kV line to increase the emergency rating		AEP (100%)
b1422 Perform a sag study on John Amos – St. Albans 138 kV line to allow for operation up to its conductor emergency rating		AEP (100%)
b1423 A sag study will be performed on the Chemical – Capitol Hill 138 kV line to determine if the emergency rating can be utilized		AEP (100%)
b1424 Perform a sag study for Benton Harbor – West Street – Hartford 138 kV line to improve the emergency rating		AEP (100%)
b1425 Perform a sag study for the East Monument – East Danville 138 kV line to allow for operation up to the conductor’s maximum operating temperature		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1426 Perform a sag study for the Reusens – Graves 138 kV line to allow for operation up to the conductor’s maximum operating temperature		AEP (100%)
b1427 Perform a sag study on Smith Mountain – Leesville – Altavista – Otter 138 kV and on Boones – Forest – New London – JohnsMT – Otter		AEP (100%)
b1428 Perform a sag study on Smith Mountain – Candler’s Mountain 138 kV and Joshua Falls – Cloverdale 765 kV to allow for operation up to		AEP (100%)
b1429 Perform a sag study on Fremont – Clinch River 138 kV to allow for operation up to its conductor emergency ratings		AEP (100%)
b1430 Install a new 138 kV circuit breaker at Benton Harbor station and move the load from Watervliet 34.5 kV station to West street 138 kV		AEP (100%)
b1432 Perform a sag study on the Kenova – Tri State 138 kV line to allow for operation up to their conductor emergency rating		AEP (100%)
b1433 Replace risers in the West Huntington Station to increase the line ratings which would eliminate the overloads for the contingencies listed		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1434 Perform a sag study on the line from Desoto to Madison. Replace bus and risers at Daleville station and replace bus and risers at Madison		AEP (100%)
b1435 Replace the 2870 MCM ACSR riser at the Sporn station		AEP (100%)
b1436 Perform a sag study on the Sorenson – Illinois Road 138 kV line to increase the emergency MOT for this line. Replace bus and risers at Illinois Road		AEP (100%)
b1437 Perform sag study on Rock Cr. – Hummel Cr. 138 kV to increase the emergency MOT for the line, replace bus and risers at Huntington J., and replace relays for Hummel Cr. – Hunt – Soren. Line at Soren		AEP (100%)
b1438 Replacement of risers at McKinley and Industrial Park stations and performance of a sag study for the 4.53 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA		AEP (100%)
b1439 By replacing the risers at Lincoln both the Summer Normal and Summer Emergency ratings will improve to 268 MVA		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1440	By replacing the breakers at Lincoln the Summer Emergency rating will improve to 251 MVA	AEP (100%)
b1441	Replacement of risers at South Side and performance of a sag study for the 1.91 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1442	Replacement of 954 ACSR conductor with 1033 ACSR and performance of a sag study for the 4.54 miles of 2-636 ACSR section is expected	AEP (100%)
b1443	Station work at Thelma and Busseyville Stations will be performed to replace bus and risers	AEP (100%)
b1444	Perform electrical clearance studies on Clinch River – Clinchfield 139 kV line (a.k.a. sag studies) to determine if the emergency ratings can be utilized	AEP (100%)
b1445	Perform a sag study on the Addison (Buckeye CO-OP) – Thinever and North Crown City – Thivener 138 kV sag study and switch	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1446	Perform a sag study on the Parkersburg (Allegheny Power) – Belpre (AEP) 138 kV		AEP (100%)
b1447	Dexter – Elliot tap 138 kV sag check		AEP (100%)
b1448	Dexter – Meigs 138 kV Electrical Clearance Study		AEP (100%)
b1449	Meigs tap – Rutland 138 kV sag check		AEP (100%)
b1450	Muskingum – North Muskingum 138 kV sag check		AEP (100%)
b1451	North Newark – Sharp Road 138 kV sag check		AEP (100%)
b1452	North Zanesville – Zanesville 138 kV sag check		AEP (100%)
b1453	North Zanesville – Powelson and Ohio Central – Powelson 138 kV sag check		AEP (100%)
b1454	Perform an electrical clearance study on the Ross – Delano – Scioto Trail 138 kV line to determine if the emergency rating can be utilized		AEP (100%)
b1455	Perform a sag check on the Sunny – Canton Central – Wagenhals 138 kV line to determine if all circuits can be operated at their summer emergency rating		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1456	The Tidd – West Bellaire 345 kV circuit has been de-rated to its normal rating and would need an electrical clearance study to determine if the emergency rating can be utilized	
b1457	The Tiltonsville – Windsor 138 kV circuit has been derated to its normal rating and would need an electrical clearance study to determine if the emergency rating could be utilized	AEP (100%)
b1458	Install three new 345 kV breakers at Bixby to separate the Marquis 345 kV line and transformer #2. Operate Circleville – Harrison 138 kV and Harrison – Zuber 138 kV up to conductor emergency ratings	AEP (100%)
b1459	Several circuits have been de-rated to their normal conductor ratings and could benefit from electrical clearance studies to determine if the emergency rating could be utilized	AEP (100%)
b1460	Replace 2156 & 2874 risers	AEP (100%)
b1461	Replace meter, metering CTs and associated equipment at the Paden City feeder	AEP (100%)
b1462	Replace relays at both South Cadiz 138 kV and Tidd 138 kV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1463	Reconductor the Bexley – Groves 138 kV circuit	AEP (100%)
b1464	Corner 138 kV upgrades	AEP (100%)
b1465.1	Add a 3rd 2250 MVA 765/345 kV transformer at Sullivan station	AEC (0.71%) / AEP (75.17%) / APS (1.25%) / BGE (1.81%) / ComEd (5.92%) / Dayton (0.86%) / DL (1.23%) / DPL (0.95%) / Dominion (3.90%) / JCPL (1.58%) / NEPTUNE (0.15%) / PECO (2.08%) / PEPCO (1.66%) / PSEG (2.63%) / RE (0.10%)
b1465.2	Replace the 100 MVAR 765 kV shunt reactor bank on Rockport – Jefferson 765 kV line with a 300 MVAR bank at Rockport Station	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (100%)</u>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1465.3	Transpose the Rockport – Sullivan 765 kV line and the Rockport – Jefferson 765 kV line	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  AEP (100%)</p>
b1465.4	Make switching improvements at Sullivan and Jefferson 765 kV stations	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  AEP (100%)</p>
b1466.1	Create an in and out loop at Adams Station by removing the hard tap that currently exists	AEP (100%)
b1466.2	Upgrade the Adams transformer to 90 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1466.3	At Seaman Station install a new 138 kV bus and two new 138 kV circuit breakers	AEP (100%)
b1466.4	Convert South Central Co-op's New Market 69 kV Station to 138 kV	AEP (100%)
b1466.5	The Seaman – Highland circuit is already built to 138 kV, but is currently operating at 69 kV, which would now increase to 138 kV	AEP (100%)
b1466.6	At Highland Station, install a new 138 kV bus, three new 138 kV circuit breakers and a new 138/69 kV 90 MVA transformer	AEP (100%)
b1466.7	Using one of the bays at Highland, build a 138 kV circuit from Hillsboro – Highland 138 kV, which is approximately 3 miles	AEP (100%)
b1467.1	Install a 14.4 MVar Capacitor Bank at New Buffalo station	AEP (100%)
b1467.2	Reconfigure the 138 kV bus at LaPorte Junction station to eliminate a contingency resulting in loss of two 138 kV sources serving the LaPorte area	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1468.1	Expand Selma Parker Station and install a 138/69/34.5 kV transformer	AEP (100%)
b1468.2	Rebuild and convert 34.5 kV line to Winchester to 69 kV, including Farmland Station	AEP (100%)
b1468.3	Retire the 34.5 kV line from Haymond to Selma Wire	AEP (100%)
b1469.1	Conversion of the Newcomerstown – Cambridge 34.5 kV system to 69 kV operation	AEP (100%)
b1469.2	Expansion of the Derwent 69 kV Station (including reconfiguration of the 69 kV system)	AEP (100%)
b1469.3	Rebuild 11.8 miles of 69 kV line, and convert additional 34.5 kV stations to 69 kV operation	AEP (100%)
b1470.1	Build a new 138 kV double circuit off the Kanawha – Bailyville #2 138 kV circuit to Skin Fork Station	AEP (100%)
b1470.2	Install a new 138/46 kV transformer at Skin Fork	AEP (100%)
b1470.3	Replace 5 Moab's on the Kanawha – Baileysville line with breakers at the Sundial 138 kV station	AEP (100%)
b1471	Perform a sag study on the East Lima – For Lima – Rockhill 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1472	Perform a sag study on the East Lima – Haviland 138 kV line to increase the emergency rating	AEP (100%)
b1473	Perform a sag study on the East New Concord – Muskingum River section of the Muskingum River – West Cambridge 138 kV circuit	AEP (100%)
b1474	Perform a sag study on the Ohio Central – Prep Plant tap 138 kV circuit	AEP (100%)
b1475	Perform a sag study on the S73 – North Delphos 138 kV line to increase the emergency rating	AEP (100%)
b1476	Perform a sag study on the S73 – T131 138 kV line to increase the emergency rating	AEP (100%)
b1477	The Natrium – North Martin 138 kV circuit would need an electrical clearance study among other equipment upgrades	AEP (100%)
b1478	Upgrade Strouds Run – Strouds Tap 138 kV relay and riser	AEP (100%)
b1479	West Hebron station upgrades	AEP (100%)
b1480	Perform upgrades and a sag study on the Corner – Layman 138 kV section of the Corner – Muskingum River 138 kV circuit	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1481	Perform a sag study on the West Lima – Eastown Road – Rockhill 138 kV line and replace the 138 kV risers at Rockhill station to increase the emergency rating	AEP (100%)
b1482	Perform a sag study for the Albion – Robison Park 138 kV line to increase its emergency rating	AEP (100%)
b1483	Sag study 1 mile of the Clinch River – Saltville 138 kV line and replace the risers and bus at Clinch River, Lebanon and Elk Garden Stations	AEP (100%)
b1484	Perform a sag study on the Hacienda – Harper 138 kV line to increase the emergency rating	AEP (100%)
b1485	Perform a sag study on the Jackson Road – Concord 183 kV line to increase the emergency rating	AEP (100%)
b1486	The Matt Funk – Poages Mill – Starkey 138 kV line requires	AEP (100%)
b1487	Perform a sag study on the New Carlisle – Trail Creek 138 kV line to increase the emergency rating	AEP (100%)
b1488	Perform a sag study on the Olive – LaPorte Junction 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1489	A sag study must be performed for the 5.40 mile Tristate – Chadwick 138 kV line to determine if a higher emergency rating can be used	AEP (100%)
b1490.1	Establish a new 138/69 kV Butler Center station	AEP (100%)
b1490.2	Build a new 14 mile 138 kV line from Auburn station to Woods Road station VIA Butler Center station	AEP (100%)
b1490.3	Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer	AEP (100%)
b1490.4	Improve the switching arrangement at Kendallville station	AEP (100%)
b1491	Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line	AEP (100%)
b1492	Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR	AEP (100%)
b1493	Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating	AEP (100%)
b1494	Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to increase its emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1495	Add an additional 765/345 kV transformer at Baker Station	AEC (0.41%) / AEP (87.29%) / BGE (1.03%) / ComEd (3.39%) / Dayton (1.23%) / DL (1.46%) / DPL (0.54%) / JCPL (0.90%) / NEPTUNE (0.09%) / PECO (1.18%) / PEPCO (0.94%) / PSEG (1.48%) / RE (0.06%)
b1496	Replace 138 kV bus and risers at Johnson Mountain Station	AEP (100%)
b1497	Replace 138 kV bus and risers at Leesville Station	AEP (100%)
b1498	Replace 138 kV risers at Wurno Station	AEP (100%)
b1499	Perform a sag study on Sporn A – Gavin 138 kV to determine if the emergency rating can be improved	AEP (100%)
b1500	The North East Canton – Wagenhals 138 kV circuit would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)
b1501	The Moseley – Reusens 138 kV circuit requires a sag study to determine if the emergency rating can be utilized to address a thermal loading issue for a category C3	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1502	Reconductor the Conesville East – Conesville Prep Plant Tap 138 kV section of the Conesville – Ohio Central to fix Reliability N-1-1 thermal overloads		AEP (100%)
b1659	Establish Sorenson 345/138 kV station as a 765/345 kV station		AEP (93.67%) / ATSI (2.99%) / ComEd (2.07%) / PENELEC (0.31%) / PSEG (0.92%) / RE (0.04%)
b1659.1	Replace Sorenson 138 kV breaker 'L1'		AEP (100%)
b1659.2	Replace Sorenson 138 kV breaker 'L2' breaker		AEP (100%)
b1659.3	Replace Sorenson 138 kV breaker 'M1'		AEP (100%)
b1659.4	Replace Sorenson 138 kV breaker 'M2'		AEP (100%)
b1659.5	Replace Sorenson 138 kV breaker 'N1'		AEP (100%)
b1659.6	Replace Sorenson 138 kV breaker 'N2'		AEP (100%)
b1659.7	Replace Sorenson 138 kV breaker 'O1'		AEP (100%)
b1659.8	Replace Sorenson 138 kV breaker 'O2'		AEP (100%)
b1659.9	Replace Sorenson 138 kV breaker 'M'		AEP (100%)
b1659.10	Replace Sorenson 138 kV breaker 'N'		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1659.11	Replace Sorenson 138 kV breaker 'O'	AEP (100%)
b1659.12	Replace McKinley 138 kV breaker 'L1'	AEP (100%)
b1659.13	Establish 765 kV yard at Sorenson and install four 765 kV breakers	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> AEP (73.42%) / Dayton (11.78%) / DEOK (14.80%)
b1659.14	Build approximately 14 miles of 765 kV line from existing Dumont - Marysville line	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> AEP (63.21%) / ATSI (18.99%) / ComEd (3.32%) / Dayton (8.73%) / DL (5.41%) / EKPC (0.34%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1660	Install a 765/500 kV transformer at Cloverdale	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (98.28%) / DEOK (0.45%) /</u> <u>Dominion (1.11%) / EKPC</u> <u>(0.16%)</u>
b1661	Install a 765 kV circuit breaker at Wyoming station	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>AEP (100%)</u>



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Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1662	Rebuild 4 miles of 46 kV line to 138 kV from Pemberton to Cherry Creek		AEP (100%)
b1662.1	Circuit Breakers are installed at Cherry Creek (facing Pemberton) and at Pemberton (facing Tams Mtn. and Cherry Creek)		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1662.2	Install three 138 kV breakers at Grandview Station (facing Cherry Creek, Hinton, and Bradley Stations)	AEP (100%)
b1662.3	Remove Sullivan Switching Station (46 kV)	AEP (100%)
b1663	Install a new 765/138 kV transformer at Jackson Ferry substation	AEP (100%)
b1663.1	Establish a new 10 mile double circuit 138 kV line between Jackson Ferry and Wythe	AEP (100%)
b1663.2	Install 2 765 kV circuit breakers, breaker disconnect switches and associated bus work for the new 765 kV breakers, and new relays for the 765 kV breakers at Jackson's Ferry	<u><b>Load-Ratio Share Allocation:</b></u> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<u><b>DFAX Allocation:</b></u> AEP (100%)
b1664	Install switched capacitor banks at Kenwood 138 kV stations	AEP (100%)
b1665	Install a second 138/69 kV transformer at Thelma station	AEP (100%)
b1665.1	Construct a single circuit 69 kV line from West Paintsville to the new Paintsville station	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1665.2	Install new 7.2 MVAR, 46 kV bank at Kenwood Station		AEP (100%)
b1666	Build an 8 breaker 138 kV station tapping both circuits of the Fostoria - East Lima 138 kV line		AEP (90.65%) / Dayton (9.35%)
b1667	Establish Melmore as a switching station with both 138 kV circuits terminating at Melmore. Extend the double circuit 138 kV line from Melmore to Fremont Center		AEP (100%)
b1668	Revise the capacitor setting at Riverside 138 kV station		AEP (100%)
b1669	Capacitor setting changes at Ross 138 kV stations		AEP (100%)
b1670	Capacitor setting changes at Wooster 138 kV station		AEP (100%)
b1671	Install four 138 kV breakers in Danville area		AEP (100%)
b1676	Replace Natrium 138 kV breaker 'G (rehab)'		AEP (100%)
b1677	Replace Huntley 138 kV breaker '106'		AEP (100%)
b1678	Replace Kammer 138 kV breaker 'G'		AEP (100%)
b1679	Replace Kammer 138 kV breaker 'H'		AEP (100%)
b1680	Replace Kammer 138 kV breaker 'J'		AEP (100%)
b1681	Replace Kammer 138 kV breaker 'K'		AEP (100%)
b1682	Replace Kammer 138 kV breaker 'M'		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1683	Replace Kammer 138 kV breaker 'N'	AEP (100%)
b1684	Replace Clinch River 138 kV breaker 'E1'	AEP (100%)
b1685	Replace Lincoln 138 kV breaker 'D'	AEP (100%)
b1687	Advance s0251.7 (Replace Corrid 138 kV breaker '104S')	AEP (100%)
b1688	Advance s0251.8 (Replace Corrid 138 kV breaker '104C')	AEP (100%)
b1712.1	Perform sag study on Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1712.2	Rebuild the Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1733	Perform a sag study of the Bluff Point - Jauy 138 kV line. Upgrade breaker, wavetrap, and risers at the terminal ends	AEP (100%)
b1734	Perform a sag study of Randolph - Hodgins 138 kV line. Upgrade terminal equipment	AEP (100%)
b1735	Perform a sag study of R03 - Magely 138 kV line. Upgrade terminal equipment	AEP (100%)
b1736	Perform a sag study of the Industrial Park - Summit 138 kV line	AEP (100%)
b1737	Sag study of Newcomerstown - Hillview 138 kV line. Upgrade - terminal equipment	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1738	Perform a sag study of the Wolf Creek - Layman 138 kV line. -Upgrade terminal equipment including a 138 kV breaker and wavetrap		AEP (100%)
b1739	Perform a sag study of the Ohio Central - West Trinway 138 kV line		AEP (100%)
b1741	Replace Beatty 138 kV breaker '2C(IPP)'		AEP (100%)
b1742	Replace Beatty 138 kV breaker '1E'		AEP (100%)
b1743	Replace Beatty 138 kV breaker '2E'		AEP (100%)
b1744	Replace Beatty 138 kV breaker '3C'		AEP (100%)
b1745	Replace Beatty 138 kV breaker '2W'		AEP (100%)
b1746	Replace St. Claire 138 kV breaker '8'		AEP (100%)
b1747	Replace Cloverdale 138 kV breaker 'C'		AEP (100%)
b1748	Replace Cloverdale 138 kV breaker 'D1'		AEP (100%)
b1780	Install two 138kV breakers and two 138kV circuit switchers at South Princeton Station and one 138kV breaker and one 138kV circuit switcher at Switchback Station		AEP (100%)
b1781	Install three 138 kV breakers and a 138kV circuit switcher at Trail Fork Station in Pineville, WV		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1782	Install a 46kV Moab at Montgomery Station facing Carbondale (on the London - Carbondale 46 kV circuit)	AEP (100%)
b1783	Add two 138 kV Circuit Breakers and two 138 kV circuit switchers on the Lonesome Pine - South Bluefield 138 kV line	AEP (100%)
b1784	Install a 52.8 MVAR capacitor bank at the Clifford 138 kV station	AEP (100%)
b1811.1	Perform a sag study of 4 miles of the Waterford - Muskingum line	AEP (100%)
b1811.2	Rebuild 0.1 miles of Waterford - Muskingum 345 kV with 1590 ACSR	AEP (100%)
b1812	Reconductor the AEP portion of the South Canton - Harmon 345 kV with 954 ACSR and upgrade terminal equipment at South Canton. Expected rating is 1800 MVA S/N and 1800 MVA S/E	AEP (100%)
b1817	Install (3) 345 kV circuit breakers at East Elkhart station in ring bus designed as a breaker and half scheme	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1818	Expand the Allen station by installing a second 345/138 kV transformer and adding four 138 kV exits by cutting in the Lincoln - Sterling and Milan - Timber Switch 138 kV double circuit tower line	AEP (88.30%) / ATSI (8.86%) / Dayton (2.84%)
b1819	Rebuild the Robinson Park - Sorenson 138 kV line corridor as a 345 kV double circuit line with one side operated at 345 kV and one side at 138 kV	AEP (87.18%) / ATSI (10.06%) / Dayton (2.76%)
b1859	Perform a sag study for Hancock - Cave Spring - Roanoke 138 kV circuit to reach new SE ratings of 272MVA (Cave Spring-Hancock), 205MVA (Cave Spring-Sunscape), 245MVA (ROANO2-Sunscape)	AEP (100%)
b1860	Perform a sag study on the Crooksville - Spencer Ridge section (14.3 miles) of the Crooksville-Poston-Strouds Run 138 kV circuit to see if any remedial action needed to reach the SE rating (175MVA)	AEP (100%)
b1861	Reconductor 0.83 miles of the Dale - West Canton 138 kV Tie-line and upgrade risers at West Canton 138 kV	AEP (100%)
b1862	Perform a sag study on the Grant - Greentown 138 kV circuit and replace the relay CT at Grant 138 kV station to see if any remedial action needed to reach the new ratings of 251/286MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1863	Perform a sag study of the Kammer - Wayman SW 138 kV line to see if any remedial action needed to reach the new SE rating of 284MVA	AEP (100%)
b1864.1	Add two additional 345/138 kV transformers at Kammer	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.2	Add second West Bellaire - Brues 138 kV circuit	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.3	Replace Kammer 138 kV breaker 'E'	AEP (100%)
b1865	Perform a sag study on the Kanawha - Carbondale 138 kV line to see if any remedial action needed to reach the new ratings of 251/335MVA	AEP (100%)
b1866	Perform a sag study on the Clinch River-Lock Hart-Dorton 138kV line, increase the Relay Compliance Trip Limit at Clinch River on the C.R.-Dorton 138kV line to 310 and upgrade the risers with 1590ACSR	AEP (100%)
b1867	Perform a sag study on the Newcomerstown - South Coshocton 138 kV line to see if any remedial action is needed to reach the new SE rating of 179MVA	AEP (100%)
b1868	Perform sag study on the East Lima - new Liberty 138 kV line to see if any remedial action is needed to reach the new SE rating of 219MVA	AEP (100%)



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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1869	Perform a sag study of the Ohio Central - South Coshocton 138 kV circuit to see if any remedial action needed to reach the new SE ratings of 250MVA	AEP (100%)
b1870	Replace the Ohio Central transformer #1 345/138/12 kV 450 MVA for a 345/138/34.5 kV 675 MVA transformer	AEP (68.16%) / ATSI (25.27%) / Dayton (3.88%) / PENELEC (1.59%) / DEOK (1.10%)
b1871	Perform a sag study on the Central - West Coshocton 138 kV line (improving the emergency rating of this line to 254 MVA)	AEP (100%)
b1872	Add a 57.6 MVar capacitor bank at East Elkhart 138 kv station in Indiana	AEP (100%)
b1873	Install two 138 kV circuit breakers at Cedar Creek Station and primary side circuit switcher on the 138/69/46 kV transformer	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1874	Install two 138 kV circuit breakers and one 138 kV circuit switcher at Magely 138 kV station in Indiana	AEP (100%)
b1875	Build 25 miles of new 138 kV line from Bradley Station through Tower 117 Station and terminating at McClung 138 kV station. Existing 69 kV distribution transformers will be replaced with 138 kV transformers	AEP (100%)
b1876	Install a 14.4 MVar capacitor bank at Capital Avenue (AKA Currant Road) 34.5 kV bus	AEP (100%)
b1877	Relocate 138 kV Breaker G to the West Kingsport - Industry Drive 138 kV line and Remove 138 kV MOAB	AEP (100%)
b1878	Perform a sag study on the Lincoln - Robinson Park 138 kV line (Improve the emergency rating to 244 MVA)	AEP (100%)
b1879	Perform a sag study on the Hansonville - Meadowview 138 kV line (Improve the emergency rating to 245 MVA)	AEP (100%)
b1880	Rebuild the 15 miles of the Moseley - Roanoke 138 kV line. This project would consist of rebuilding both circuits on the double circuit line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1881	Replace existing 600 Amp switches, station risers and increase the CT ratios associated with breaker 'G' at Sterling 138 kV Station. It will increase the rating to 296 MVA S/N and 384 MVA S/E	AEP (100%)
b1882	Perform a sag study on the Bluff Point - Randolph 138 kV line to see if any remedial action needed to reach the new SE rating of 255 MVA	AEP (100%)
b1883	Switch the breaker position of transformer #1 and SW Lima at East Lima 345 kV bus	AEP (100%)
b1884	Perform a sag study on Strawton station - Fisher Body - Deer Creek 138 kV line to see if any remedial action needed to reach the new SE rating of 250 MVA	AEP (100%)
b1887	Establish a new 138/69 kV source at Carrollton and construct two new 69 kV lines from Carrollton to tie into the Dennison - Miller SW 69 kV line and to East Dover 69 kV station respectively	AEP (100%)
b1888	Install a 69 kV line breaker at Blue Pennant 69 kV Station facing Bim Station and 14.4 MVar capacitor bank	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1889	Install a 43.2 MVAR capacitor bank at Hinton 138 kV station (APCO WV)	AEP (100%)
b1901	Rebuild the Ohio Central - West Trinway (4.84 miles) section of the Academia - Ohio Central 138 kV circuit. Upgrade the Ohio Central riser, Ohio Central switch and the West Trinway riser	AEP (100%)
b1904.1	Construct new 138/69 Michiana Station near Bridgman by tapping the new Carlisle - Main Street 138 kV and the Bridgman - Buchanan Hydro 69 kV line	AEP (100%)
b1904.2	Establish a new 138/12 kV New Galien station by tapping the Olive - Hickory Creek 138 kV line	AEP (100%)
b1904.3	Retire the existing Galien station and move its distribution load to New Galien station. Retire the Buchanan Hydro - New Carlisle 34.5 kV line	AEP (100%)
b1904.4	Implement an in and out scheme at Cook 69 kV by eliminating the Cook 69 kV tap point and by installing two new 69 kV circuit breakers	AEP (100%)
b1904.5	Rebuild the Bridgman - Cook 69 kV and the Derby - Cook 69 kV lines	AEP (100%)
b1946	Perform a sag study on the Brues - West Bellaire 138 kV line	AEP (100%)
b1947	A sag study of the Dequine - Meadowlake 345 kV line #1 line may improve the emergency rating to 1400 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1948 Establish a new 765/345 interconnection at Sporn. Install a 765/345 kV transformer at Mountaineer and build ¾ mile of 345 kV to Sporn		ATSI (61.08%) / DL (21.87%) / Dominion (13.97%) / PENELEC (3.08%)
b1949 Perform a sag study on the Grant Tap – Deer Creek 138 kV line and replace bus and risers at Deer Creek station		AEP (100%)
b1950 Perform a sag study on the Kammer – Ormet 138 kV line of the conductor section		AEP (100%)
b1951 Perform a sag study of the Maddox- Convoy 345 kV line to improve the emergency rating to 1400 MVA		AEP (100%)
b1952 Perform a sag study of the Maddox – T130 345 kV line to improve the emergency rating to 1400 MVA		AEP (100%)
b1953 Perform a sag study of the Meadowlake - Olive 345 kV line to improve the emergency rating to 1400 MVA		AEP (100%)
b1954 Perform a sag study on the Milan - Harper 138 kV line and replace bus and switches at Milan Switch station		AEP (100%)
b1955 Perform a sag study of the R-049 - Tillman 138 kV line may improve the emergency rating to 245 MVA		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1956 Perform a sag study of the Tillman - Dawkins 138 kV line may improve the emergency rating to 245 MVA		AEP (100%)
b1957 Terminate Transformer #2 at SW Lima in a new bay position		AEP (69.66%) / ATSI (23.19%) / PENELEC (2.43%) / PSEG (4.54%) / RE (0.18%)
b1958 Perform a sag study on the Brookside - Howard 138 kV line and replace bus and risers at AEP Howard station		AEP (100%)
b1960 Sag Study on 7.2 miles SE Canton-Canton Central 138kV ckt		AEP (100%)
b1961 Sag study on the Southeast Canton – Sunnyside 138kV line		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1962	Add four 765 kV breakers at Kammer	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEP (100%)</u></p>
b1963	Build approximately 1 mile of circuit comprising of 2-954 ACSR to get the rating of Waterford-Muskinum 345 kV higher	AEP (100%)
b1970	Reconductor 13 miles of the Kammer – West Bellaire 345kV circuit	APS (33.58%) / ATSI (32.28%) / DL (18.68%) / Dominion (6.02%) / JCPL (1.68%) / Neptune* (0.18%) / PENELEC (4.59%) / PSEG (2.88%) / RE (0.11%)
b1971	Perform a sag study to improve the emergency rating on the Bridgville – Chandlersville 138 kV line	AEP (100%)
b1972	Replace disconnect switch on the South Canton 765/345 kV transformer	AEP (100%)

\*Neptune Regional Transmission System, LLC

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1973	Perform a sag study to improve the emergency rating on the Carrollton – Sunnyside 138 kV line	AEP (100%)
b1974	Perform a sag study to improve the emergency rating on the Bethel Church – West Dover 138 kV line	AEP (100%)
b1975	Replace a switch at South Millersburg switch station	AEP (100%)
b2017	Reconductor or rebuild Sporn - Waterford - Muskingum River 345 kV line	ATSI (37.10%) / AEP (34.41%) / DL (10.43%) / Dominion (6.20%) / APS (3.95%) / PENELEC (3.10%) / JCPL (1.39%) / Dayton (1.20%) / Neptune* (0.14%) / PSEG (2.00%) / RE (0.08%)
b2018	Loop Conesville - Bixby 345 kV circuit into Ohio Central	ATSI (58.58%) / AEP (14.16%) / APS (12.88%) / DL (7.93%) / PENELEC (5.73%) / Dayton (0.72%)
b2019	Establish Burger 345/138 kV station	AEP (93.74%) / APS (4.40%) / DL (1.11%) / ATSI (0.74%) / PENELEC (0.01%)
b2020	Rebuild Amos - Kanawah River 138 kV corridor	AEP (88.39%) / APS (7.12%) / ATSI (2.89%) / DEOK (1.58%) / PEPCO (0.02%)
b2021	Add 345/138 transformer at Sporn, Kanawah River & Muskingum River stations	AEP (91.92%) / DEOK (3.60%) / APS (2.19%) / ATSI (1.14%) / DL (1.08%) / PEPCO (0.04%) / BGE (0.03%)
b2021.1	Replace Kanawah 138 kV breaker 'L'	AEP (100%)
b2021.2	Replace Muskingum 138 kV breaker 'HG'	AEP (100%)

\*Neptune Regional Transmission System, LLC



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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2021.3	Replace Muskingum 138 kV breaker 'HJ'		AEP (100%)
b2021.4	Replace Muskingum 138 kV breaker 'HE'		AEP (100%)
b2021.5	Replace Muskingum 138 kV breaker 'HD'		AEP (100%)
b2021.6	Replace Muskingum 138 kV breaker 'HF'		AEP (100%)
b2021.7	Replace Muskingum 138 kV breaker 'HC'		AEP (100%)
b2021.8	Replace Sporn 138 kV breaker 'D1'		AEP (100%)
b2021.9	Replace Sporn 138 kV breaker 'D2'		AEP (100%)
b2021.10	Replace Sporn 138 kV breaker 'F1'		AEP (100%)
b2021.11	Replace Sporn 138 kV breaker 'F2'		AEP (100%)
b2021.12	Replace Sporn 138 kV breaker 'G'		AEP (100%)
b2021.13	Replace Sporn 138 kV breaker 'G2'		AEP (100%)
b2021.14	Replace Sporn 138 kV breaker 'N1'		AEP (100%)
b2021.15	Replace Kanawah 138 kV breaker 'M'		AEP (100%)
b2022	Terminate Tristate - Kyger Creek 345 kV line at Sporn		AEP (97.99%) / DEOK (2.01%)
b2027	Perform a sag study of the Tidd - Collier 345 kV line		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2028	Perform a sag study on East Lima - North Woodcock 138 kV line to improve the rating	AEP (100%)
b2029	Perform a sag study on Bluebell - Canton Central 138 kV line to improve the rating	AEP (100%)
b2030	Install 345 kV circuit breakers at West Bellaire	AEP (100%)
b2031	Sag study on Tilton - W. Bellaire section 1 (795 ACSR), about 12 miles	AEP (100%)
b2032	Rebuild 138 kV Elliot tap - Poston line	ATSI (73.02%) / Dayton (19.39%) / DL (7.59%)
b2033	Perform a sag study of the Brues - W. Bellaire 138 kV line	AEP (100%)
b2046	Adjust tap settings for Muskingum River transformers	AEP (100%)
b2047	Replace relay at Greenlawn	AEP (100%)
b2048	Replace both 345/138 kV transformers with one bigger transformer	AEP (92.49%) / Dayton (7.51%)
b2049	Replace relay	AEP (100%)
b2050	Perform sag study	AEP (100%)
b2051	Install 3 138 kV breakers and a circuit switcher at Dorton station	AEP (100%)
b2052	Replace transformer	AEP (67.17%) / ATSI (27.37%) / Dayton (3.73%) / PENELEC (1.73%)
b2054	Perform a sag study of Sporn - Rutland 138 kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2069 Replace George Washington 138 kV breaker 'A' with 63kA rated breaker		AEP (100%)
b2070 Replace Harrison 138 kV breaker '6C' with 63kA rated breaker		AEP (100%)
b2071 Replace Lincoln 138 kV breaker 'L' with 63kA rated breaker		AEP (100%)
b2072 Replace Natrum 138 kV breaker 'T' with 63kA rated breaker		AEP (100%)
b2073 Replace Darrah 138 kV breaker 'B' with 63kA rated breaker		AEP (100%)
b2074 Replace Wyoming 138 kV breaker 'G' with 80kA rated breaker		AEP (100%)
b2075 Replace Wyoming 138 kV breaker 'G1' with 80kA rated breaker		AEP (100%)
b2076 Replace Wyoming 138 kV breaker 'G2' with 80kA rated breaker		AEP (100%)
b2077 Replace Wyoming 138 kV breaker 'H' with 80kA rated breaker		AEP (100%)
b2078 Replace Wyoming 138 kV breaker 'H1' with 80kA rated breaker		AEP (100%)
b2079 Replace Wyoming 138 kV breaker 'H2' with 80kA rated breaker		AEP (100%)
b2080 Replace Wyoming 138 kV breaker 'J' with 80kA rated breaker		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2081	Replace Wyoming 138 kV breaker 'J1' with 80kA rated breaker		AEP (100%)
b2082	Replace Wyoming 138 kV breaker 'J2' with 80kA rated breaker		AEP (100%)
b2083	Replace Natrum 138 kV breaker 'K' with 63kA rated breaker		AEP (100%)
b2084	Replace Tanner Creek 345 kV breaker 'P' with 63kA rated breaker		AEP (100%)
b2085	Replace Tanner Creek 345 kV breaker 'P2' with 63kA rated breaker		AEP (100%)
b2086	Replace Tanner Creek 345 kV breaker 'Q1' with 63kA rated breaker		AEP (100%)
b2087	Replace South Bend 138 kV breaker 'T' with 63kA rated breaker		AEP (100%)
b2088	Replace Tidd 138 kV breaker 'L' with 63kA rated breaker		AEP (100%)
b2089	Replace Tidd 138 kV breaker 'M2' with 63kA rated breaker		AEP (100%)
b2090	Replace McKinley 138 kV breaker 'A' with 40kA rated breaker		AEP (100%)
b2091	Replace West Lima 138 kV breaker 'M' with 63kA rated breaker		AEP (100%)
b2092	Replace George Washington 138 kV breaker 'B' with 63kA rated breaker		AEP (100%)

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**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2093	Replace Turner 138 kV breaker 'W' with 63kA rated breaker	AEP (100%)
b2135	Build a new 138 kV line from Falling Branch to Merrimac and add a 138/69 kV transformer at Merrimac Station	AEP (100%)
b2160	Add a fourth circuit breaker to the station being built for the U4-038 project (Conelley), rebuild U4-038 - Grant Tap line as double circuit tower line	AEP (100%)
b2161	Rebuild approximately 20 miles of the Allen - S073 double circuit 138 kV line (with one circuit from Allen - Tillman - Timber Switch - S073 and the other circuit from Allen - T-131 - S073) utilizing 1033 ACSR	AEP (100%)
b2162	Perform a sag study to improve the emergency rating of the Belpre - Degussa 138 kV line	AEP (100%)
b2163	Replace breaker and wavetrap at Jay 138 kV station	AEP (100%)

\*Neptune Regional Transmission System, LLC

## SCHEDULE 12 – APPENDIX

### (20) Virginia Electric and Power Company

Required Transmission Enhancements      Annual Revenue Requirement\*\*\* Responsible Customer(s)

b0217	Upgrade Mt. Storm - Doubs 500kV		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd (13.31%)  / Dayton (2.11%) / DEOK  (3.29%) / DL (1.75%) / DPL  (2.50%) / Dominion (12.86%) /  EKPC (1.87%) / JCPL (3.74%) /  ME (1.90%) / NEPTUNE*  (0.44%) / PECO (5.34%) /  PENELEC (1.89%) / PEPCO  (3.99%) / PPL (4.84%) / PSEG  (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (25.20%) / BGE (10.49%) /</u>  <u>Dominion (52.48%) / PEPCO</u>  <u>(11.83%)</u></p>
b0222	Install 150 MVAR capacitor at Loudoun 500 kV		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd (13.31%)  / Dayton (2.11%) / DEOK  (3.29%) / DL (1.75%) / DPL  (2.50%) / Dominion (12.86%) /  EKPC (1.87%) / JCPL (3.74%) /  ME (1.90%) / NEPTUNE*  (0.44%) / PECO (5.34%) /  PENELEC (1.89%) / PEPCO  (3.99%) / PPL (4.84%) / PSEG  (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

\*\*\* The Annual Revenue Requirement for all Virginia Electric and Power Company projects in this Section 20 shall be as specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B.

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0223	Install 150 MVAR capacitor at Asburn 230 kV		Dominion (100%)
b0224	Install 150 MVAR capacitor at Dranesville 230 kV		Dominion (100%)
b0225	Install 33 MVAR capacitor at Possum Pt. 115 kV		Dominion (100%)
b0226	Install 500/230 kV transformer at Clifton and Clifton 500 kV 150 MVAR capacitor	As specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B	APS (3.69%) / BGE (3.54%) / Dominion (85.73%) / PEPCO (7.04%)
b0227	Install 500/230 kV transformer at Bristers; build new 230 kV Bristers-Gainsville circuit, upgrade two Loudoun-Brambleton circuits		AEC (0.71%) / APS (3.36%) / BGE (10.93%) / DPL (1.66%) / Dominion (67.38%) / ME (0.89%) / PECO (2.33%) / PEPCO (12.20%) / PPL (0.54%)
b0227.1	Loudoun Sub – upgrade 6-230 kV breakers		Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0231	Install 500 kV breakers & 500 kV bus work at Suffolk		<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPSCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b><u>DFAX Allocation:</u></b> <u>Dominion (100%)</u>
b0231.2	Install 500/230 kV Transformer, 230 kV breakers, & 230 kV bus work at Suffolk		Dominion (100%)
b0232	Install 150 MVAR capacitor at Lynnhaven 230 kV		Dominion (100%)
b0233	Install 150 MVAR capacitor at Landstown 230 kV		Dominion (100%)
b0234	Install 150 MVAR capacitor at Greenwich 230 kV		Dominion (100%)
b0235	Install 150 MVAR capacitor at Fentress 230 kV		Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0307	Reconductor Endless Caverns – Mt. Jackson 115 kV		Dominion (100%)
b0308	Replace L breaker and switches at Endless Caverns 115 kV		Dominion (100%)
b0309	Install SPS at Earleys 115 kV		Dominion (100%)
b0310	Reconductor Club House – South Hill and Chase City – South Hill 115 kV		Dominion (100%)
b0311	Reconductor Idylwood to Arlington 230 kV		Dominion (100%)
b0312	Reconductor Gallows to Ox 230 kV		Dominion (100%)
b0325	Install a 2 <sup>nd</sup> Everetts 230/115 kV transformer		Dominion (100%)
b0326	Uprate/resag Remington-Brandywine-Culppr 115 kV		Dominion (100%)
b0327	Build 2 <sup>nd</sup> Harrisonburg – Valley 230 kV		APS (19.79%) / Dominion (76.18%) / PEPSCO (4.03%)
b0328.1	Build new Meadow Brook – Loudoun 500 kV circuit (30 of 50 miles)		<u><b>Load-Ratio Share Allocation:</b></u> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPSCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<u><b>DFAX Allocation:</b></u> Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.3	Upgrade Mt. Storm 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</u>
b0328.4	Upgrade Loudoun 500 kV substation	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (100%)</u>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit		Dominion (100%)††
b0329.1	Replace Thole Street 115 kV breaker ‘48T196’		Dominion (100%)
b0329.2	Replace Chesapeake 115 kV breaker ‘T242’		Dominion (100%)
b0329.3	Replace Chesapeake 115 kV breaker ‘8722’		Dominion (100%)
b0329.4	Replace Chesapeake 115 kV breaker ‘16422’		Dominion (100%)
b0330	Install Crewe 115 kV breaker and shift load from line 158 to 98		Dominion (100%)
b0331	Upgrade/resag Shell Bank – Whealton 115 kV (Line 165)		Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0332	Uprate/resag Chesapeake – Cradock 115 kV	Dominion (100%)
b0333	Replace wave trap on Elmont – Replace (Line #231)	Dominion (100%)
b0334	Uprate/resag Iron Bridge-Walmsley-Southwest 230 kV	Dominion (100%)
b0335	Build Chase City – Clarksville 115 kV	Dominion (100%)
b0336	Reconductor one span of Chesapeake – Dozier 115 kV close to Dozier substation	Dominion (100%)
b0337	Build Lexington 230 kV ring bus	Dominion (100%)
b0338	Replace Gordonsville 230/115 kV transformer for larger one	Dominion (100%)
b0339	Install Breaker at Doods 230 kV Sub	Dominion (100%)
b0340	Reconductor one span Peninsula – Magruder 115 kV close to Magruder substation	Dominion (100%)
b0341	Install a breaker at Northern Neck 115 kV	Dominion (100%)
b0342	Replace Trowbridge 230/115 kV transformer	Dominion (100%)
b0403	2 <sup>nd</sup> Doods 500/230 kV transformer addition	APS (3.35%) / BGE (4.22%) / DPL (1.10%) / Dominion (83.94%) / PEPCO (7.39%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0412	Retension Pruntytown – Mt. Storm 500 kV to a 3502 MVA rating	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (51.45%) / DEOK (17.51%) / PEPCO (31.04%)</u></p>
b0450	Install 150 MVAR Capacitor at Fredricksburg 230 kV	Dominion (100%)
b0451	Install 25 MVAR Capacitor at Somerset 115 kV	Dominion (100%)
b0452	Install 150 MVAR Capacitor at Northwest 230 kV	Dominion (100%)
b0453.1	Convert Remington – Sowego 115 kV to 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.2	Add Sowego – Gainesville 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.3	Add Sowego 230/115 kV transformer	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0454	Reconductor 2.4 miles of Newport News – Chuckatuck 230 kV	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0455	Add 2 <sup>nd</sup> Endless Caverns 230/115 kV transformer	APS (32.70%) / BGE (7.01%) / DPL (1.80%) / Dominion (50.82%) / PEPCO (7.67%)
b0456	Reconductor 9.4 miles of Edinburg – Mt. Jackson 115 kV	APS (33.69%) / BGE (12.18%) / Dominion (40.08%) / PEPCO (14.05%)
b0457	Replace both wave traps on Dooks – Lexington 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <b><u>Dominion (100%)</u></b>
b0467.2	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.54%) / PEPCO (41.86%) / PPL (2.07%)

\* Neptune Regional Transmission System, LLC

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**Virginia Electric and Power Company (cont.)**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.6	Replace Mount Storm 500 kV breaker 55072		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>
b0492.7	Replace Mount Storm 500 kV breaker 55172		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.8	Replace Mount Storm 500 kV breaker H1172-2	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>
b0492.9	Replace Mount Storm 500 kV breaker G2T550	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.10	Replace Storm breaker G2T554	Mount 500 kV
		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>
b0492.11	Replace Storm breaker G1T551	Mount 500 kV
		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.12	Upgrade nameplate rating of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</u></p>
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.5	Advance n0716 (Ox - Replace 230kV breaker L242)		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.6	Advance n0717 (Possum Point - Replace 230kV breaker SC192)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0583	Install dual primary protection schemes on Gosport lines 62 and 51 at the remote terminals (Chesapeake on the 62 line and Reeves Ave on the 51 line)	Dominion (100%)
b0756	Install a second 500/115 kV autotransformer at Chancellor 500 kV	Dominion (100%)
b0756.1	Install two 500 kV breakers at Chancellor 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <b><u>Dominion (100%)</u></b>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0757	Reconductor one mile of Chesapeake – Reeves Avenue 115 kV line	Dominion (100%)
b0758	Install a second Fredericksburg 230/115 kV autotransformer	Dominion (100%)
b0760	Build 115 kV line from Kitty Hawk to Colington 115 kV (Colington on the existing line and Nag's Head and Light House DP on new line)	Dominion (100%)
b0761	Install a second 230/115 kV transformer at Possum Point	Dominion (100%)
b0762	Build a new Elko station and transfer load from Turner and Providence Forge stations	Dominion (100%)
b0763	Rebuild 17.5 miles of the line for a new summer rating of 262 MVA	Dominion (100%)
b0764	Increase the rating on 2.56 miles of the line between Greenwich and Thompson Corner; new rating to be 257 MVA	Dominion (100%)
b0765	Add a second Bull Run 230/115 kV autotransformer	Dominion (100%)
b0766	Increase the rating of the line between Loudoun and Cedar Grove to at least 150 MVA	Dominion (100%)
b0767	Extend the line from Old Church – Chickahominy 230 kV	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0768	Loop line #251 Idylwood – Arlington into the GIS sub	Dominion (100%)
b0769	Re-tension 15 miles of the line for a new summer rating of 216 MVA	Dominion (100%)
b0770	Add a second 230/115 kV autotransformer at Lanexa	Dominion (100%)
b0770.1	Replace Lanexa 115 kV breaker '8532'	Dominion (100%)
b0770.2	Replace Lanexa 115 kV breaker '9232'	Dominion (100%)
b0771	Build a parallel Chickahominy – Lanexa 230 kV line	Dominion (100%)
b0772	Install a second Elmont 230/115 kV autotransformer	Dominion (100%)
b0772.1	Replace Elmont 115 kV breaker '7392'	Dominion (100%)
b0774	Install a 33 MVAR capacitor at Bremo 115 kV	Dominion (100%)
b0775	Reconductor the Greenwich – Virginia Beach line to bring it up to a summer rating of 261 MVA; Reconductor the Greenwich – Amphibious Base line to bring it up to 291 MVA	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0776	Re-build Trowbridge – Winfall 115 kV	Dominion (100%)
b0777	Terminate the Thelma – Carolina 230 kV circuit into Lakeview 230 kV	Dominion (100%)
b0778	Install 29.7 MVAR capacitor at Lebanon 115 kV	Dominion (100%)
b0779	Build a new 230 kV line from Yorktown to Hayes but operate at 115 kV initially	Dominion (100%)
b0780	Reconductor Chesapeake – Yadkin 115 kV line	Dominion (100%)
b0781	Reconductor and replace terminal equipment on line 17 and replace the wave trap on line 88	Dominion (100%)
b0782	Install a new 115 kV capacitor at Dupont Waynesboro substation	Dominion (100%)
b0784	Replace wave traps on North Anna to Ladysmith 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (100%)</u>
b0785	Rebuild the Chase City – Crewe 115 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0786	Reconductor the Moran DP – Crewe 115 kV segment	Dominion (100%)
b0787	Upgrade the Chase City – Twitty’s Creek 115 kV segment	Dominion (100%)
b0788	Reconductor the line from Farmville – Pamplin 115 kV	Dominion (100%)
b0793	Close switch 145T183 to network the lines. Rebuild the section of the line #145 between Possum Point – Minnieville DP 115 kV	Dominion (100%)
b0815	Replace Elmont 230 kV breaker '22192'	Dominion (100%)
b0816	Replace Elmont 230 kV breaker '21692'	Dominion (100%)
b0817	Replace Elmont 230 kV breaker '200992'	Dominion (100%)
b0818	Replace Elmont 230 kV breaker '2009T2032'	Dominion (100%)
b0837	At Mt. Storm, replace the existing MOD on the 500 kV side of the transformer with a circuit breaker	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0888	Replace Loudoun 230 kV Cap breaker 'SC352'		Dominion (100%)
b0892	Replace Chesapeake 115 kV breaker SX522		Dominion (100%)
b0893	Replace Chesapeake 115 kV breaker T202		Dominion (100%)
b0894	Replace Possum Point 115 kV breaker SX-32		Dominion (100%)
b0895	Replace Possum Point 115 kV breaker L92-1		Dominion (100%)
b0896	Replace Possum Point 115 kV breaker L92-2		Dominion (100%)
b0897	Replace Suffolk 115 kV breaker T202		Dominion (100%)
b0898	Replace Peninsula 115 kV breaker SC202		Dominion (100%)
b0921	Reconductor Brambleton - Cochran Mill 230 kV line with 201 Yukon conductor		Dominion (100%)
b0923	Install 50-100 MVAR variable reactor banks at Carson 230 kV		Dominion (100%)
b0924	Install 50-100 MVAR variable reactor banks at Dooms 230 kV		Dominion (100%)
b0925	Install 50-100 MVAR variable reactor banks at Garrisonville 230 kV		Dominion (100%)
b0926	Install 50-100 MVAR variable reactor banks at Hamilton 230 kV		Dominion (100%)
b0927	Install 50-100 MVAR variable reactor banks at Yadkin 230 kV		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0928	Install 50-100 MVAR variable reactor banks at Carolina, Doods, Everetts, Idylwood, N. Alexandria, N. Anna, Suffolk and Valley 230 kV substations	Dominion (100%)
b1056	Build a 2nd Shawboro – Elizabeth City 230kV line	Dominion (100%)
b1058	Add a third 230/115 kV transformer at Suffolk substation	Dominion (100%)
b1058.1	Replace Suffolk 115 kV breaker 'T122' with a 40 kA breaker	Dominion (100%)
b1058.2	Convert Suffolk 115 kV straight bus to a ring bus for the three 230/115 kV transformers and three 115 kV lines	Dominion (100%)
b1071	Rebuild the existing 115 kV corridor between Landstown - Va Beach Substation for a double circuit arrangement (230 kV & 115 kV)	Dominion (100%)
b1076	Replace existing North Anna 500-230kV transformer with larger unit	Dominion (100%)
b1087	Replace Cannon Branch 230-115 kV with larger transformer	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1088	Build new Radnor Heights Sub, add new underground circuit from Ballston - Radnor Heights, Tap the Glebe - Davis line and create circuits from Davis - Radnor Heights and Glebe - Radnor Heights		Dominion (100%)
b1089	Install 2nd Burke to Sideburn 230 kV underground cable		Dominion (100%)
b1090	Install a 150 MVAR 230 kV capacitor and one 230 kV breaker at Northwest		Dominion (100%)
b1095	Reconductor Chase City 115 kV bus and add a new tie breaker		Dominion (100%)
b1096	Construct 10 mile double ckt. 230kV tower line from Loudoun to Middleburg		Dominion (100%)
b1102	Replace Bremo 115 kV breaker '9122'		Dominion (100%)
b1103	Replace Bremo 115 kV breaker '822'		Dominion (100%)
b1172	Build a 4-6 mile long 230 kV line from Hopewell to Bull Hill (Ft Lee) and install a 230-115 kV Tx		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1188	Build new Brambleton 500 kV three breaker ring bus connected to the Loudoun to Pleasant View 500 kV line	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1188.1	Replace Loudoun 230 kV breaker '200852' with a 63 kA breaker	Dominion (100%)
b1188.2	Replace Loudoun 230 kV breaker '2008T2094' with a 63 kA breaker	Dominion (100%)
b1188.3	Replace Loudoun 230 kV breaker '204552' with a 63 kA breaker	Dominion (100%)
b1188.4	Replace Loudoun 230 kV breaker '209452' with a 63 kA breaker	Dominion (100%)
b1188.5	Replace Loudoun 230 kV breaker 'WT2045' with a 63 kA breaker	Dominion (100%)
b1188.6	Install one 500/230 kV transformer and two 230 kV breakers at Brambleton	AEC (0.22%) / BGE (7.90%) / DPL (0.59%) / Dominion (75.58%) / ME (0.22%) / PECO (0.73%) / PEPCO (14.76%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1224	Install 2nd Clover 500/230 kV transformer and a 150 MVar capacitor	BGE (7.56%) / DPL (1.03%) / Dominion (78.21%) / ME (0.77%) / PECO (1.39%) / PEPCO (11.04%)
b1225	Replace Yorktown 115 kV breaker 'L982-1'	Dominion (100%)
b1226	Replace Yorktown 115 kV breaker 'L982-2'	Dominion (100%)
b1279	Line #69 Uprate – Increase rating on Locks – Purdy 115 kV to serve additional load at the Reams delivery point	Dominion (100%)
b1306	Reconfigure 115 kV bus at Endless Caverns substation such that the existing two 230/115 kV transformers at Endless Caverns operate in	Dominion (100%)
b1307	Install a 2nd 230/115 kV transformer at Northern Neck Substation	Dominion (100%)
b1308	Improve LSE's power factor factor in zone to .973 PF, adjust LTC's at Gordonsville and Remington, move existing shunt capacitor banks	Dominion (100%)
b1309	Install a 230 kV line from Lakeside to Northwest utilizing the idle line and 60 line ROW's and reconductor the existing 221 line between Elmont and Northwest	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1310	Install a 115 kV breaker at Broadnax substation on the South Hill side of Broadnax	Dominion (100%)
b1311	Install a 230 kV 3000 amp breaker at Cranes Corner substation to sectionalize the 2104 line into two lines	Dominion (100%)
b1312	Loop the 2054 line in and out of Hollymeade and place a 230 kV breaker at Hollymeade. This creates two lines: Charlottesville - Hollymeade	Dominion (100%)
b1313	Resag wire to 125C from Chesterfield – Shockoe and replace line switch 1799 with 1200 amp switch. The new rating would be 231 MVA.	Dominion (100%)
b1314	Rebuild the 6.8 mile line #100 from Chesterfield to Harrowgate 115 kV for a minimum 300 MBA rating	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1315	Convert line #64 Trowbridge to Winfall to 230 kV and install a 230 kV capacitor bank at Winfall		Dominion (100%)
b1316	Rebuild 10.7 miles of 115 kV line #80, Battleboro – Heartsease DP		Dominion (100%)
b1317	LSE load power factor on the #47 line will need to meet MOA requirements of .973 in 2015 to further resolve this issue through at least 2019		Dominion (100%)
b1318	Install a 115 kV bus tie breaker at Acca substation between the Line #60 and Line #95 breakers		Dominion (100%)
b1319	Resag line #222 to 150 C and upgrade any associated equipment to a 2000A rating to achieve a 706 MVA summer line rating		Dominion (100%)
b1320	Install a 230 kV, 150 MVAR capacitor bank at Southwest substation		Dominion (100%)
b1321	Build a new 230 kV line North Anna – Oak Green and install a 224 MVA 230/115 kV transformer at Oak Green		BGE (0.85%) / Dominion (97.96%) / PEPCO (1.19%)
b1322	Rebuild the 39 Line (Dooms – Sherwood) and the 91 Line (Sherwood – Bremono)		Dominion (100%)
b1323	Install a 224 MVA 230/115 kV transformer at Staunton. Rebuild the 115 kV line #43 section Staunton - Verona		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1324	Install a 115 kV capacitor bank at Oak Ridge. Install a capacitor bank at New Bohemia. Upgrade 230/34.5 kV transformer #3 at Kings Fork	Dominion (100%)
b1325	Rebuild 15 miles of line #2020 Winfall – Elizabeth City with a minimum 900 MVA rating	Dominion (100%)
b1326	Install a third 168 MVA 230/115 kV transformer at Kitty Hawk with a normally open 230 kV breaker and a low side 115 kV breaker	Dominion (100%)
b1327	Rebuild the 20 mile section of line #22 between Kerr Dam – Eatons Ferry substations	Dominion (100%)
b1328	Uprate the 3.63 mile line section between Possum and Dumfries substations, replace the 1600 amp wave trap at Possum Point	AEC (0.66%) / APS (3.59%) / DPL (0.91%) / Dominion (92.94%) / PECO (1.90%)
b1329	Install line-tie breakers at Sterling Park substation and BECO substation	Dominion (100%)
b1330	Install a five breaker ring bus at the expanded Dulles substation to accommodate the existing Dulles Arrangement and support the Metrorail	Dominion (100%)
b1331	Build a 230 kV line from Shawboro to Aydlett tap and connect Aydlett to the new line	Dominion (100%)
b1332	Build Cannon Branch to Nokesville 230 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1333 Advance n1728 (Replace Possum Point 230 kV breaker H9T237 with an 80 kA breaker)		Dominion (100%)
b1334 Advance n1748 (Replace Ox 230 kV breaker 22042 with a 63 kA breaker)		Dominion (100%)
b1335 Advance n1749 (Replace Ox 230 kV breaker 220T2603 with a 63 kA breaker)		Dominion (100%)
b1336 Advance n1750 (Replace Ox 230 kV breaker 24842 with a 63 kA breaker)		Dominion (100%)
b1337 Advance n1751 (Replace Ox 230 kV breaker 248T2013 with a 63 kA breaker)		Dominion (100%)
b1503.1 Loop Line #2095 in and out of Waxpool approximately 1.5 miles		Dominion (100%)
b1503.2 Construct a new 230kV line from Brambleton to BECO Substation of approximately 11 miles with approximately 10 miles utilizing the vacant side of existing Line #2095 structures		Dominion (100%)
b1503.3 Install a one 230 kV breaker, Future 230 kV ring-bus at Waxpool Substation		Dominion (100%)
b1503.4 The new Brambleton - BECO line will feed Shellhorn Substation load and Greenway TX's #2&3 load		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1506.1	At Gainesville Substation, create two 115 kV straight-buses with a normally open tie-breaker	Dominion (100%)
b1506.2	Upgrade Line 124 (radial from Loudoun) to a minimum continuous rating of 500 MVA and network it into the 115 kV bus feeding NOVEC's DP at Gainesville	Dominion (100%)
b1506.3	Install two additional 230 kV breakers in the ring at Gainesville (may require substation expansion) to accommodate conversion of NOVEC's Gainesville to Wheeler line	Dominion (100%)
b1506.4	Convert NOVEC's Gainesville-Wheeler line from 115 kV to 230 kV (will require Gainesville DP Upgrade replacement of three transformers total at Atlantic and Wheeler Substations)	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1507	Rebuild Mt Storm – Doubs 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (25.20%) / BGE (10.49%) / Dominion (52.48%) / PEPCO (11.83%)</u></p>
b1508.1	Build a 2nd 230 kV Line Harrisonburg to Endless Caverns	APS (37.05%) / Dominion (62.95%)
b1508.2	Install a 3rd 230-115 kV Tx at Endless Caverns	APS (37.05%) / Dominion (62.95%)
b1508.3	Upgrade a 115 kV shunt capacitor banks at Merck and Edinburg	APS (37.05%) / Dominion (62.95%)
b1536	Advance n1752 (Replace OX 230 breaker 24342 with an (63kA breaker)	Dominion (100%)
b1537	Advance n1753 (Replace OX 230 breaker 243T2097 with an 63kA breaker)	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1538	Replace Loudoun 230 kV breaker '29552'		Dominion (100%)
b1571	Replace Acca 115 kV breaker '6072' with 40 kA		Dominion (100%)
b1647	Upgrade the name plate rating at Morrisville 500kV breaker 'H1T573' with 50kA breaker		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1648	Upgrade name plate rating at Morrisville 500kV breaker 'H2T545' with 50kA breaker		<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1649	Replace Morrisville 500kV breaker 'H1T580' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  Dominion (100%)</p>
b1650	Replace Morrisville 500kV breaker 'H2T569' with 50kA breaker	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  Dominion (100%)</p>
b1651	Replace Loudoun 230kV breaker '295T2030' with 63kA breaker	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1652	Replace Ox 230kV breaker '209742' with 63kA breaker	Dominion (100%)
b1653	Replace Clifton 230kV breaker '26582' with 63kA breaker	Dominion (100%)
b1654	Replace Clifton 230kV breaker '26682' with 63kA breaker	Dominion (100%)
b1655	Replace Clifton 230kV breaker '205182' with 63kA breaker	Dominion (100%)
b1656	Replace Clifton 230kV breaker '265T266' with 63kA breaker	Dominion (100%)
b1657	Replace Clifton 230kV breaker '2051T2063' with 63kA breaker	Dominion (100%)
b1694	Rebuild Loudoun - Brambleton 500 kV Rebuild Loudoun - Brambleton 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (84.25%) / PEPCO (15.75%)</u>
b1696	Install a breaker and a half scheme with a minimum of eight 230 kV breakers for five existing lines at Idylwood 230 kV	AEC (0.46%) / APS (4.18%) / BGE (2.02%) / DPL (0.80%) / Dominion (88.45%) / JCPL (0.64%) / ME (0.50%) / NEPTUNE* (0.06%) / PECO (1.55%) / PEPCO (1.34%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1697	Build a 2nd Clark - Idylwood 230 kV line and install 230 kV gas-hybrid breakers at Clark	AEC (1.35%) / APS (15.65%) / BGE (10.53%) / DPL (2.59%) / Dominion (46.97%) / JCPL (2.36%) / ME (1.91%) / NEPTUNE* (0.23%) / PECO (4.48%) / PEPCO (11.23%) / PSEG (2.59%) / RE (0.11%)
b1698	Install a 2nd 500/230 kV transformer at Brambleton	APS (4.21%) / BGE (13.28%) / DPL (1.09%) / Dominion (59.38%) / PEPCO (22.04%)
b1698.1	Install a 500 kV breaker at Brambleton	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (100%)</u>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1698.6	Replace Brambleton 230 kV breaker '2094T2095'	Dominion (100%)
b1699	Reconfigure Line #203 to feed Edwards Ferry sub radial from Pleasant View 230 kV and install new breaker bay at Pleasant View Sub	Dominion (100%)
b1700	Install a 230/115 kV transformer at the new Liberty substation to relieve Gainesville Transformer #3	Dominion (100%)
b1701	Reconductor line #2104 (Fredericksburg - Cranes Corner 230 kV)	APS (8.66%) / BGE (10.95%) / Dominion (63.30%) / PEPCO (17.09%)
b1724	Install a 2nd 138/115 kV transformer at Edinburg	Dominion (100%)
b1728	Replace the 115/34.5 kV transformer #1 at Hickory with a 230/34.5 kV transformer	Dominion (100%)
b1729	Add 4 breaker ring bus at Burton 115 kV substation and construct a 115 kV line approximately 3.5 miles from Oakwood 115 kV substation to Burton 115 kV substation	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1730	Install a 230/115 kV transformer at a new Liberty substation	Dominion (100%)
b1731	Uprate or rebuild Four Rivers – Kings Dominion 115 kV line or Install capacitors or convert load from 115 kV system to 230 kV system	Dominion (100%)
b1790	Split Wharton 115 kV capacitor bank into two smaller units and add additional reactive support in area by correcting power factor at Pantego 115 kV DP and FivePoints 115 kV DP to minimum of 0.973	Dominion (100%)
b1791	Wreck and rebuild 2.1 mile section of Line #11 section between Gordonsville and Somerset	APS (5.83%) / BGE (6.25%) / Dominion (78.38%) / PEPCO (9.54%)
b1792	Rebuild line #33 Halifax to Chase City, 26 miles. Install 230 kV 4 breaker ring bus	Dominion (100%)
b1793	Wreck and rebuild remaining section of Line #22, 19.5 miles and replace two pole H frame construction built in 1930	Dominion (100%)
b1794	Split 230 kV Line #2056 (Hornertown - Rocky Mount) and double tap line to Battleboro Substation. Expand station, install a 230 kV 3 breaker ring bus and install a 230/115 kV transformer	Dominion (100%)



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1795	Reconductor segment of Line #54 (Carolina to Woodland 115 kV) to a minimum of 300 MVA	Dominion (100%)
b1796	Install 115 kV 25 MVAR capacitor bank at Kitty Hawk Substation	Dominion (100%)
b1797	Wreck and rebuild 7 miles of the Dominion owned section of Cloverdale - Lexington 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>APS (56.31%) / ATSI (2.31%) / Dayton (0.70%) / DEOK (1.72%) / Dominion (4.80%) / EKPC (0.60%) / PEPCO (33.56%)</u>
b1798	Build a 450 MVAR SVC and 300 MVAR switched shunt at Loudoun 500 kV	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <u>Dominion (100%)</u>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1799	Build 150 MVAR Switched Shunt at Pleasant View 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPSCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (0.36%) / DPL (0.07%) / Dominion (99.36%) / ME (0.07%) / PEPSCO (0.14%)</u></p>
b1805	Install a 250 MVAR SVC at the existing Mt. Storm 500kV substation	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPSCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>APS (74.10%) / PEPSCO (25.90%)</u></p>
b1809	Replace Brambleton 230 kV Breaker '22702'	Dominion (100%)
b1810	Replace Brambleton 230 kV Breaker '227T2094'	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.1	Surry to Skiffes Creek 500 kV Line (7 miles overhead)	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  Dominion (100%)</p>
b1905.2	Surry 500 kV Station Work	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  Dominion (100%)</p>
b1905.3	Skiffes Creek 500-230 kV Tx and Switching Station	Dominion (99.84%) / PEPCO (0.16%)
b1905.4	New Skiffes Creek - Whealton 230 kV line	Dominion (99.84%) / PEPCO (0.16%)
b1905.5	Whealton 230 kV breakers	Dominion (99.84%) / PEPCO (0.16%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.6	Yorktown 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.7	Lanexa 115 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.8	Surry 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.9	Kings Mill, Peninmen, Toano, Waller, Warwick	Dominion (99.84%) / PEPCO (0.16%)
b1906.1	At Yadkin 500 kV, install six 500 kV breakers	<b><u>Load-Ratio Share Allocation:</u></b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b><u>DFAX Allocation:</u></b> <b><u>Dominion (100%)</u></b>
b1906.2	Install a 2nd 230/115 kV TX at Yadkin	Dominion (100%)
b1906.3	Install a 2nd 230/115 kV TX at Chesapeake	Dominion (100%)
b1906.4	Uprate Yadkin – Chesapeake 115 kV	Dominion (100%)
b1906.5	Install a third 500/230 kV TX at Yadkin	Dominion (100%)
b1907	Install a 3rd 500/230 kV TX at Clover	APS (5.83%) / BGE (4.74%) / Dominion (81.79%) / PEPCO (7.64%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1908	Rebuild Lexington – Dooms 500 kV	<p><b><u>Load-Ratio Share Allocation:</u></b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b><u>DFAX Allocation:</u></b>  <u>Dominion (100%)</u></p>
b1909	Uprate Bremono – Midlothian 230 kV to its maximum operating temperature	APS (6.31%) / BGE (3.81%) / Dominion (81.90%) / PEPCO (7.98%)
b1910	Build a Suffolk – Yadkin 230 kV line (14 miles) and install 4 breakers	Dominion (100%)
b1911	Add a second Valley 500/230 kV TX	APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)
b1912	Install a 500 MVAR SVC at Landstown 230 kV	DEOK (0.46%) / Dominion (99.54%)
b2053	Rebuild 28 mile line	AEP (100%)
b2125	Install four additional 230 kV 100 MVAR variable shunt reactor banks at Clifton, Gallows Road, Garrisonville, and Virginia Hills substations	Dominion (100%)
b2126	Install two additional 230 kV 100 MVAR variable shunt reactor banks at Churchland and Shawboro substations	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2181	Add a motor to an existing switch at Prince George to allow for Sectionalizing scheme for line #2124 and allow for Brickhouse DP to be re-energized from the 115 kV source	Dominion (100%)
b2182	Install 230kV 4-breaker ring at Enterprise 230 kV to isolate load from transmission system when substation initially built	Dominion (100%)
b2183	Add a motor to an existing switch at Keene Mill to allow for a sectionalizing scheme	Dominion (100%)
b2184	Install a 230 kV breaker at Tarboro to split line #229. Each will feed an autotransformer at Tarboro. Install switches on each autotransformer	Dominion (100%)
b2185	Uprate Line #69 segment Reams DP to Purdy (19 miles) from 41 MVA to 162 MVA by replacing 5 structures and re-sagging the line from 50C to 75C	Dominion (100%)
b2186	Install a 2nd 230-115kV transformer at Earleys connected to the existing 115kV and 230kV ring busses. Add a 115 kV breaker and 230kV breaker to the ring busses	Dominion (100%)
b2187	Install 4 - 230kV breakers at Shellhorn 230 kV to isolate load	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## **ATTACHMENT B**

Schedule 12 – Appendix  
Versions effective January 1, 2016 - 2016 Annual Update  
(Clean Format)

## SCHEDULE 12 – APPENDIX

### (1) Atlantic City Electric Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0135	Build new Cumberland – Dennis 230 kV circuit which replaces existing Cumberland – Corson 138 kV		AEC (100%)
b0136	Install Dennis 230/138 kV transformer, Dennis 150 MVAR SVC and 50 MVAR capacitor		AEC (100%)
b0137	Build new Dennis – Corson 138 kV circuit		AEC (100%)
b0138	Install Cardiff 230/138 kV transformer and a 50 MVAR capacitor at Cardiff		AEC (100%)
b0139	Build new Cardiff – Lewis 138 kV circuit		AEC (100%)
b0140	Reconductor Laurel – Woodstown 69 kV		AEC (100%)
b0141	Reconductor Monroe – North Central 69 kV		AEC (100%)
b0265	Upgrade AE portion of Delco Tap – Mickleton 230 kV circuit		AEC (88.94%) / ConEd (1.04%) / JCPL (9.38%) / Neptune* (0.64%)
b0276	Replace both Monroe 230/69 kV transformers		AEC (91.28%) / PSEG (8.29%) / RE (0.23%) / ECP** (0.20%)
b0276.1	Upgrade a strand bus at Monroe to increase the rating of transformer #2		AEC (100%)
b0277	Install a second Cumberland 230/138 kV transformer		AEC (100%)
b0281.1	Install 35 MVAR capacitor at Lake Ave 69 kV substation		AEC (100%)
b0281.2	Install 15 MVAR capacitor at Shipbottom 69 kV substation		AEC (100%)
b0281.3	Install 8 MVAR capacitors on the AE distribution system		AEC (100%)



## Atlantic City Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0142	Reconductor Landis – Minotola 138 kV		AEC (100%)
b0143	Reconductor Beckett – Paulsboro 69 kV		AEC (100%)
b0210	Install a new 500/230kV substation in AEC area. The high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPSCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> AEC (100%)
b0210	Install a new 500/230kV substation in AEC area, the high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.		AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)††
b0211	Reconductor Union - Corson 138kV circuit		AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)
b0212	Substation upgrades at Union and Corson 138kV		AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

**Atlantic City Electric Company (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0214	Install 50 MVAR capacitor at Cardiff 230kV substation		AEC (100%)
b0431	Monroe Upgrade New Freedom strand bus		AEC (100%)
b0576	Move the Monroe 230/69 kV to Mickleton		AEC (100%)
b0744	Upgrade a strand bus at Mill 138 kV		AEC (100%)
b0871	Install 35 MVAR capacitor at Motts Farm 69 kV		AEC (100%)
b1072	Modify the existing EMS load shedding scheme at Cedar to additionally sense the loss of both Cedar 230/69 kV transformers and shed load accordingly		AEC (100%)
b1127	Build a new Lincoln-Minitola 138 kV line		AEC (100%)
b1195.1	Upgrade the Corson sub T2 terminal		AEC (100%)
b1195.2	Upgrade the Corson sub T1 terminal		AEC (100%)
b1244	Install 10 MVAR capacitor at Peermont 69 kV substation		AEC (100%)
b1245	Rebuild the Newport-South Millville 69 kV line		AEC (100%)

## Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1250	Reconductor the Monroe – Glassboro 69 kV	AEC (100%)
b1250.1	Upgrade substation equipment at Glassboro	AEC (100%)
b1280	Sherman: Upgrade 138/69 kV transformers	AEC (100%)
b1396	Replace Lewis 138 kV breaker ‘L’	AEC (100%)
b1398.5	Reconductor the existing Mickleton – Gloucester 230 kV circuit (AE portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1598	Reconductor Sherman Av – Carl’s Corner 69kV circuit	AEC (100%)
b1599	Replace terminal equipments at Central North 69 kV substation	AEC (100%)
b1600	Upgrade the Mill T2 138/69 kV transformer	AEC (88.83%) / JCPL (4.74%) / HTP (0.20%) / ECP** (0.22%) / PSEG (5.78%) / RE (0.23%)
b2157	Re-build 5.3 miles of the Corson - Tuckahoe 69 kV circuit	AEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

## SCHEDULE 12 – APPENDIX

### (3) Delmarva Power & Light Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0144.1	Build new Red Lion – Milford – Indian River 230 kV circuit		DPL (100%)
b0144.2	Indian River Sub – 230 kV Terminal Position		DPL (100%)
b0144.3	Red Lion Sub – 230 kV Terminal Position		DPL (100%)
b0144.4	Milford Sub – (2) 230 kV Terminal Positions		DPL (100%)
b0144.5	Indian River – 138 kV Transmission Line to AT-20		DPL (100%)
b0144.6	Indian River – 138 & 69 kV Transmission Ckts. Undergrounding		DPL (100%)
b0144.7	Indian River – (2) 230 kV bus ties		DPL (100%)
b0148	Re-rate Glasgow – Mt. Pleasant 138 kV and North Seaford – South Harrington 138 kV		DPL (100%)
b0149	Complete structure work to increase rating of Cheswold – Jones REA 138 kV		DPL (100%)
b0221	Replace disconnect switch on Edgewood-N. Salisbury 69 kV		DPL (100%)
b0241.1	Keeny Sub – Replace overstressed breakers		DPL (100%)
b0241.2	Edgemoor Sub – Replace overstressed breakers		DPL (100%)
b0241.3	Red Lion Sub – Substation reconfigure to provide for second Red Lion 500/230 kV transformer		DPL (84.5%) / PECO (15.5%)
b0261	Replace 1200 Amp disconnect switch on the Red Lion – Reybold 138 kV circuit		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0262	Reconductor 0.5 miles of Christiana – Edgemoor 138 kV		DPL (100%)
b0263	Replace 1200 Amp wavetrap at Indian River on the Indian River – Frankford 138 kV line		DPL (100%)
b0272.1	Replace line trap and disconnect switch at Keeney 500 kV substation – 5025 Line Terminal Upgrade		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPSCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (22.51%) / APS (0.28%) / BGE (0.48%) / DPL (52.85%) / ECP (0.02%) / HTP (0.03%) / PECO (23.16%) / PEPSCO (0.43%) / PPL (0.24%)</p>
b0282	Install 46 MVAR capacitors on the DPL distribution system		DPL (100%)
b0291	Replace 1600A disconnect switch at Harmony 230 kV and for the Harmony – Edgemoor 230 kV circuit, increase the operating temperature of the conductor		DPL (100%)
b0295	Raise conductor temperature of North Seaford – Pine Street – Dupont Seaford		DPL (100%)
b0296	Rehoboth/Cedar Neck Tap (6733-2) upgrade		DPL (100%)
b0320	Create a new 230 kV station that splits the 2 <sup>nd</sup> Milford to Indian River 230 kV line, add a 230/69 kV transformer, and run a new 69 kV line down to Harbeson 69 kV		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0382	Cambridge Sub – Close through to Todd Substation		DPL (100%)
b0383	Wye Mills AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0384	Replace Indian River AT-20 (400 MVA)		DPL (100%)
b0385	Oak Hall to New Church (13765) Upgrade		DPL (100%)
b0386	Cheswold/Kent (6768) Rebuild		DPL (100%)
b0387	N. Seaford – Add a 2 <sup>nd</sup> 138/69 kV autotransformer		DPL (100%)
b0388	Hallwood/Parksley (6790-2) Upgrade		DPL (100%)
b0389	Indian River AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0390	Rehoboth/Lewes (6751-1 and 6751-2) Upgrade		DPL (100%)
b0391	Kent/New Meredith (6704-2) Upgrade		DPL (100%)
b0392	East New Market Sub – Establish a 69 kV Bus Arrangement		DPL (100%)
b0415	Increase the temperature ratings of the Edgemoor – Christiana – New Castle 138 kV by replacing six transmission poles		DPL (100%)
b0437	Spare Keeney 500/230 kV transformer		DPL (100%)
b0441	Additional spare Keeney 500/230 kV transformer		DPL (100%)
b0480	Rebuild Lank – Five Points 69 kV		DPL (100%)
b0481	Replace wave trap at Indian River 138 kV on the Omar – Indian River 138 kV circuit		DPL (100%)
b0482	Rebuild Millsboro – Zoar REA 69 kV		DPL (100%)
b0483	Replace Church 138/69 kV transformer and add two breakers		DPL (100%)
b0483.1	Build Oak Hall – Wattsville 138 kV line		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0483.2	Add 138/69 kV transformer at Wattsville		DPL (100%)
b0483.3	Establish 138 kV bus position at Oak Hall		DPL (100%)
b0484	Re-tension Worcester – Berlin 69 kV for 125°C		DPL (100%)
b0485	Re-tension Taylor – North Seaford 69 kV for 125°C		DPL (100%)
b0494.1	Install a 2 <sup>nd</sup> Red Lion 230/138 kV		DPL (100%)
b0494.2	Hares Corner – Relay Improvement		DPL (100%)
b0494.3	Reybold – Relay Improvement		DPL (100%)
b0494.4	New Castle – Relay Improvement		DPL (100%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

**Delmarva Power & Light Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0513	Rebuild the Ocean Bay – Maridel 69 kV line		DPL (100%)
b0527	Replace existing 12 MVAR capacitor at Bethany with a 30 MVAR capacitor		DPL (100%)
b0528	Replace existing 69/12 kV transformer at Bethany with a 138/12 kV transformer		DPL (100%)
b0529	Install an additional 8.4 MVAR capacitor at Grasonville 69 Kv		DPL (100%)
b0530	Replace existing 12 MVAR capacitor at Wye Mills with a 30 MVAR capacitor		DPL (100%)



## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0531	Create a four breaker 138 kV ring bus at Wye Mills and add a second 138/69 kV transformer		DPL (100%)
b0566	Rebuild the Trappe Tap – Todd 69 kV line		DPL (100%)
b0567	Rebuild the Mt. Pleasant – Townsend 138 kV line		DPL (100%)
b0568	Install a third Indian River 230/138 kV transformer		DPL (100%)
b0725	Add a third Steele 230/138 kV transformer		DPL (100%)
b0732	Rebuild Vaugh – Wells 69 kV		DPL (100%)
b0733	Add a second 230/138 kV transformer at Harmony		DPL (97.06%) / PECO (2.94%)
b0734	Rebuild Church – Steele 138 kV		DPL (100%)
b0735	Rebuild Indian River – Omar – Bethany 138 kV		DPL (100%)
b0736	Rebuild Dupont Edgemoor – Edgemoor – Silverside 69 kV		DPL (69.46%) / PECO (17.25%) / ECP** (0.27%) / PSEG (12.53%) / RE (0.49%)
b0737	Build a new Indian River – Bishop 138 kV line		DPL (100%)
b0750	Convert 138 kV network path from Vienna – Loretto – Piney - Grove to 230 kV, add 230/138 kV transformer to Loretto 230 kV		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0751	Add two additional breakers at Keeney 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  DPL (100%)</p>
b0752	Replace two circuit breakers to bring the emergency rating up to 348 MVA	DPL (100%)
b0753	Add a second Loretto 230/138 kV transformer	DPL (100%)
b0754	Rebuild 10 miles of Glasgow to Mt. Pleasant 138 kV line to bring the normal rating to 298 MVA and the emergency rating to 333 MVA	DPL (100%)
b0792	Reconfigure Cecil Sub into 230 and 138 kV ring buses, add a 230/138 kV transformer, and operate the 34.5 kV bus normally open	DPL (100%)
b0873	Build 2nd Glasgow-Mt Pleasant 138 kV line	DPL (100%)
b0874	Reconfigure Brandywine substation	DPL (100%)
b0876	Install 50 MVAR SVC at 138th St 138 kV	DPL (100%)
b0877	Build a 2nd Vienna-Steele 230 kV line	DPL (100%)
b0879.1	Apply a special protection scheme (load drop at Stevensville and Grasonville)	DPL (100%)

**Delmarva Power & Light Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1246	Re-build the Townsend – Church 138 kV circuit		DPL (100%)
b1247	Re-build the Glasgow – Cecil 138 kV circuit		DPL (72.06%) / PECO (27.94%)
b1248	Install two 15 MVAR capacitor at Loretto 69 kV		DPL (100%)
b1249	Reconfigure the existing Sussex 69 kV capacitor		DPL (100%)
b1603	Upgrade 19 miles conductor of the Wattsville - Signepost - Stockton - Kenney 69 kV circuit		DPL (100%)
b1604	Replace CT at Reybold 138 kV substation		DPL (100%)
b1723	Replace strand bus and disconnect switch at Glasgow 138 kV substation		DPL (100%)
b1899.1	Install new variable reactors at Indian River and Nelson 138 kV		DPL (100%)
b1899.2	Install new variable reactors at Cedar Creek 230 kV		DPL (100%)
b1899.3	Install new variable reactors at New Castle 138 kV and Easton 69 kV		DPL (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-3.

## SCHEDULE 12 – APPENDIX

### (5) Metropolitan Edison Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0215	Install 230Kv series reactor and 2- 100MVAR PLC switched capacitors at Hunterstown	AEC (6.68%) / APS (3.95%) / ConEd (0.42%) / DPL (9.06%) / JCPL (16.78%) / ME (10.49%) / Neptune* (1.68%) / PECO (18.92%) / PPL (7.52%) / PSEG (22.57%) / RE (0.34%) / UGI (0.95%) / ECP** (0.64%)
b0404.1	Replace South Reading 230 kV breaker 107252	ME (100%)
b0404.2	Replace South Reading 230 kV breaker 100652	ME (100%)
b0575.1	Rebuild Hunterstown – Texas Eastern Tap 115 kV	ME (100%)
b0575.2	Rebuild Texas Eastern Tap – Gardners 115 kV and associated upgrades at Gardners including disconnect switches	ME (100%)
b0650	Reconductor Jackson – JE Baker – Taxville 115 kV line	ME (100%)
b0652	Install bus tie circuit breaker on Yorkana 115 kV bus and expand the Yorkana 230 kV ring bus by one breaker so that the Yorkana 230/115 kV banks 1, 3, and 4 cannot be lost for either B-14 breaker fault or a 230 kV line or bank fault with a stuck breaker	ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**(5) Metropolitan Edison Company**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0653 Construct a 230 kV Bernville station by tapping the North Temple – North Lebanon 230 kV line. Install a 230/69 kV transformer at existing Bernville 69 kV station		ME (100%)
b1000 Replace Portland 115kV breaker '95312'		ME (100%)
b1001 Replace Portland 115kV breaker '92712'		ME (100%)
b1002 Replace Hunterstown 115 kV breaker '96392'		ME (100%)
b1003 Replace Hunterstown 115 kV breaker '96292'		ME (100%)
b1004 Replace Hunterstown 115 kV breaker '99192'		ME (100%)
b1061 Replace existing Yorkana 230/115 kV transformer banks 1 and 4 with a single, larger transformer similar to transformer bank #3		ME (100%)
b1061.1 Replace the Yorkana 115 kV breaker '97282'		ME (100%)
b1061.2 Replace the Yorkana 115 kV breaker 'B282'		ME (100%)
b1302 Replace the limiting bus conductor and wave trap at the Jackson 115 kV terminal of the Jackson – JE Baker Tap 115 kV line		ME (100%)
b1365 Reconductor the Middletown – Collins 115 kV (975) line 0.32 miles of 336 ACSR		ME (100%)
b1366 Reconductor the Collins – Cly – Newberry 115 kV (975) line 5 miles with 795 ACSR		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**(5) Metropolitan Edison Company**

Required Transmission Enhancements   Annual Revenue Requirement   Responsible Customer(s)

b1727	Reconductor 2.4 miles of existing 556 and 795 ACSR from Harley Davidson to Pleasureville 115 kV with 795 ACSS to raise the ratings		ME (100%)
b1800	Install a 500 MVAR SVC at the existing Hunterstown 500kV substation		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> BGE (54.22%) / DPL (21.56%) / ME (24.22%)
b1801	Build a 250 MVAR SVC at Altoona 230 kV		AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / Neptune* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)
b1816.5	Replace SCCIR (Sub-conductor) at Hunterstown Substation on the No. 1, 230/115 kV transformer		ME (100%)
b1999	Replace limiting wave trap, circuit breaker, substation conductor, relay and current transformer components at Northwood		ME (100%)
b2000	Replace limiting wave trap on the Glendon - Hosensack line		ME (100%)
b2001	Replace limiting circuit breaker and substation conductor transformer components at Portland 230kV		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**(5) Metropolitan Edison Company**

Required Transmission Enhancements   Annual Revenue Requirement   Responsible Customer(s)

b2002	Northwood 230/115 kV Transformer upgrade		ME (100%)
b2023	Construct a new North Temple - Riverview - Cartech 69 kV line (4.7 miles) with 795 ACSR		ME (100%)
b2024	Upgrade 4/0 substation conductors at Middletown 69 kV		ME (100%)
b2025	Upgrade 4/0 and 350 Cu substation conductors at the Middletown Junction terminal of the Middletown Junction - Wood Street Tap 69 kV line		ME (100%)
b2026	Upgrade an OC protection relay at the Baldy 69 kV substation		ME (100%)
b2148	Install a 115 kV 28.8 MVAR capacitor at Pleasureville substation		ME (100%)
b2149	Upgrade substation riser on the Smith St. - York Inc. 115 kV line		ME (100%)
b2150	Upgrade York Haven structure 115 kV bus conductor on Middletown Jct. - Zions View 115 kV		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## SCHEDULE 12 – APPENDIX

### (7) Pennsylvania Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.1	Build 500 kV substation in PENELEC – Tap the Keystone – Juniata and Conemaugh – Juniata 500 kV, connect the circuits with a breaker and half scheme, and install new 400 MVAR capacitor	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0284.3	Replace wave trap and upgrade a bus section at Keystone 500 kV – on the Keystone – Airydale 500 kV	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0285.1	Replace wave trap at Keystone 500 kV – on the Keystone – Conemaugh 500 kV	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0285.2	Replace wave trap and relay at Conemaugh 500 kV – on the Conemaugh – Keystone 500 kV	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0349	Upgrade Rolling Meadows-Gore Jct 115 kV	PENELEC (100%)
b0360	Construction of a ring bus on the 345 kV side of Wayne substation	PENELEC (100%)
b0365	Add a 50 MVAR, 230 kV cap bank at Altoona 230 kV	PENELEC (100%)
b0369	Install 100 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0370	Install 500 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0376	Install 300 MVAR capacitor at Conemaugh 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (6.58%) / ECP (0.88%) / HTP (0.82%) / JCPL (23.16%) / ME (12.80%) / NEPTUNE (2.33%) / PECO (23.16%) / PSEG (29.08%) / RE (1.19%)</p>
b0442	Spare Keystone 500/230 kV transformer	PENELEC (100%)
b0515	Replace Lewistown circuit breaker 1LY Yeagertown	PENELEC (100%)
b0516	Replace Lewistown circuit breaker 2LY Yeagertown	PENELEC (100%)
b0517	Replace Shawville bus section circuit breaker	PENELEC (100%)
b0518	Replace Homer City circuit breaker 201 Johnstown	PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0519	Replace Keystone circuit breaker 4 Transformer - 20	PENELEC (100%)
b0549	Install 250 MVAR capacitor at Keystone 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (5.58%) / BGE (15.73%) / DPL (5.84%) / ECP (0.61%) / HTP (0.55%) / JCPL (17.34%) / ME (11.09%) / NEPTUNE (1.75%) / PECO (19.53%) / PSEG (21.12%) / RE (0.86%)
b0550	Install 25 MVAR capacitor at Lewis Run 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0551	Install 25 MVAR capacitor at Saxton 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0552	Install 50 MVAR capacitor at Altoona 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0553	Install 50 MVAR capacitor at Raystown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0555	Install 100 MVAR capacitor at Johnstown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0556	Install 50 MVAR capacitor at Grover 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0557	Install 75 MVAR capacitor at East Towanda 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0563	Install 25 MVAR capacitor at Farmers Valley 115 kV substation	PENELEC (100%)
b0564	Install 10 MVAR capacitor at Ridgeway 115 kV substation	PENELEC (100%)
b0654	Reconfigure the Cambria Slope 115 kV and Wilmore Junction 115 kV stations to eliminate Wilmore Junction 115 kV 3-terminal line	PENELEC (100%)
b0655	Reconfigure and expand the Glade 230 kV ring bus to eliminate the Glade Tap 230 kV 3-terminal line	PENELEC (100%)
b0656	Add three breakers to form a ring bus at Altoona 230 kV	PENELEC (100%)

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**Pennsylvania Electric Company (cont.)****Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)**

b0794	Upgrade the Homer City 230 kV breaker 'Pierce Road'		PENELEC (100%)
b1005	Replace Glory 115 kV breaker '#7 XFMR'		PENELEC (100%)
b1006	Replace Shawville 115 kV breaker 'NO.14 XFMR'		PENELEC (100%)
b1007	Replace Shawville 115 kV breaker 'NO.15 XFMR'		PENELEC (100%)
b1008	Replace Shawville 115 kV breaker '#1B XFMR'		PENELEC (100%)
b1009	Replace Shawville 115 kV breaker '#2B XFMR'		PENELEC (100%)
b1010	Replace Shawville 115 kV breaker 'Dubois'		PENELEC (100%)
b1011	Replace Shawville 115 kV breaker 'Philipsburg'		PENELEC (100%)
b1012	Replace Shawville 115 kV breaker 'Garman'		PENELEC (100%)
b1059	Replace a CRS relay at Hooversville 115 kV station		PENELEC (100%)
b1060	Replace a CRS relay at Rachel Hill 115 kV station		PENELEC (100%)

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**Pennsylvania Electric Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1153	Upgrade Conemaugh 500/230 kV transformer and add a new line from Conemaugh-Seward 230 kV		AEC (3.72%) / APS (6.23%) / BGE (16.75%) / ConEd (0.39%) / DL (0.32%) / JCPL (12.52%) / ME (6.87%) / PECO (11.49%) / PEPSCO (0.55%) / PPL (15.36%) / PSEG (20.44%) / RE (0.71%) / NEPTUNE* (1.70%) / ECP** (2.95%)
b1153.1	Revise the reclosing on the Shelocta 115 kV breaker 'Lucerne'		PENELEC (100%)
b1169	Replace Shawville 115 kV breaker '#1A XFMR'		PENELEC (100%)
b1170	Replace Shawville 115 kV breaker '#2A XFMR'		PENELEC (100%)
b1277	Build a new Osterburg East – Bedford North 115 kV Line, 5.7 miles of 795 ACSR		PENELEC (100%)
b1278	Install 25 MVAR Capacitor Bank at Somerset 115 kV		PENELEC (100%)
b1367	Replace the Cambria Slope 115/46 kV 50 MVA transformer with 75 MVA		PENELEC (100%)
b1368	Replace the Claysburg 115/46 kV 30 MVA transformer with 75 MVA		PENELEC (100%)
b1369	Replace the 4/0 CU substation conductor with 795 ACSR on the Westfall S21 Tap 46 kV line		PENELEC (100%)
b1370	Install a 3rd 115/46 kV transformer at Westfall		PENELEC (100%)
b1371	Reconductor 2.6 miles of the Claysburg – HCR 46 kV line with 636 ACSR		PENELEC (100%)

## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1372	Replace 4/0 CU substation conductor with 795 ACSR on the Hollidaysburg – HCR 46 kV		PENELEC (100%)
b1373	Re-configure the Erie West 345 kV substation, add a new circuit breaker and relocate the Ashtabula line exit		PENELEC (100%)
b1374	Replace wave traps at Raritan River and Deep Run 115 kV substations with higher rated equipment for both B2 and C3 circuits		PENELEC (100%)
b1535	Reconductor 0.8 miles of the Gore Junction – ESG Tap 115 kV line with 795 ACSR		PENELEC (100%)
b1607	Reconductor the New Baltimore - Bedford North 115 kV		PENELEC (100%)
b1608	Construct a new 345/115 kV substation and loop the Mansfield - Everts 115 kV		APS (8.57%) / ConEd (0.47%) / PECO (1.71%) / PENELEC (89.25%)
b1609	Construct Four Mile Junction 230/115 kV substation. Loop the Erie South - Erie East 230 kV line, Buffalo Road - Corry East and Buffalo Road - Erie South 115 kV lines		APS (4.86%) / PENELEC (95.14%)
b1610	Install a new 230 kV breaker at Yeagertown		PENELEC (100%)
b1713	Install a 345 kV breaker at Erie West and relocate Ashtabula 345 kV line		PENELEC (100%)
b1769	Install a 75 MVAR cap bank on the Four Mile 230 kV bus		PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1770	Install a 50 MVAR cap bank on the Buffalo Road 115 kV bus		PENELEC (100%)
b1802	Build a 100 MVAR Fast Switched Shunt and 200 MVAR Switched Shunt at Mansfield 345 kV		AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / NEPTUNE* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)
b1821	Replace the Erie South 115 kV breaker 'Union City'		PENELEC (100%)
b1943	Construct a 115 kV ring bus at Claysburg Substation. Bedford North and Saxton lines will no longer share a common breaker		PENELEC (100%)
b1944	Reconductor Eclipse substation 115 kV bus with 1033 kcmil conductor		PENELEC (100%)
b1945	Install second 230/115 kV autotransformer at Johnstown		PENELEC (100%)
b1966	Replace the 1200 Amp Line trap at Lewistown on the Raystown-Lewistown 230 kV line and replace substation conductor at Lewistown		PENELEC (100%)
b1967	Replace the Blairsville 138/115 kV transformer		PENELEC (100%)
b1990	Install a 25 MVAR 115 kV Capacitor at Grandview		PENELEC (100%)
b1991	Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the Homer City-Stolle Road 345 kV line into Farmers Valley		PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1992	Reconductor Cambria Slope-Summit 115kV with 795 ACSS Conductor	PENELEC (100%)
b1993	Relocate the Erie South 345 kV line terminal	APS (10.09%) / ECP** (0.45%) / HTP (0.49%) / JCPL (5.14%) / Neptune* (0.54%) / PENELEC (70.71%) / PSEG (12.10%) / RE (0.48%)
b1994	Convert Lewis Run-Farmers Valley to 230 kV using 1033.5 ACSR conductor. Project to be completed in conjunction with new Farmers Valley 345/230 kV transformation	APS (33.20%) / ECP** (0.44%) / HTP (0.44%) / JCPL (8.64%) / ME (5.52%) / Neptune (0.86%) / PENELEC (36.81%) / PSEG (13.55%) / RE (0.54%)
b1995	Change CT Ratio at Claysburg	PENELEC (100%)
b1996.1	Replace 600 Amp Disconnect Switches on Ridgeway-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1996.2	Reconductor Ridgway and Whetstone 115 kV Bus	PENELEC (100%)
b1996.3	Replace Wave Trap at Ridgway	PENELEC (100%)
b1996.4	Change CT Ratio at Ridgway	PENELEC (100%)
b1997	Replace 600 Amp Disconnect Switches on Dubois-Harvey Run-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville	PENELEC (100%)

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**Pennsylvania Electric Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

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## SCHEDULE 12 – APPENDIX

### (8) PECO Energy Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0171.1	Replace two 500 kV circuit breakers and two wave traps at Elroy substation to increase rating of Elroy - Hosensack 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.65%) / DPL (11.27%) / JCPL (15.28%) / NEPTUNE (0.01%) / PECO (67.73%) / PSEG (0.06%)</p>
b0180	Replace Whitpain 230kV circuit breaker #165	PECO (100%)
b0181	Replace Whitpain 230kV circuit breaker #J105	PECO (100%)
b0182	Upgrade Plymouth Meeting 230kV circuit breaker #125	PECO (100%)
b0205	Install three 28.8Mvar capacitors at Planebrook 35kV substation	PECO (100%)
b0206	Install 161Mvar capacitor at Planebrook 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)
b0207	Install 161Mvar capacitor at Newlinville 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)
b0208	Install 161Mvar capacitor Heaton 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)
b0209	Install 2% series reactor at Chichester substation on the Chichester - Mickleton 230kV circuit	AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0264	Upgrade Chichester – Delco Tap 230 kV and the PECO portion of the Delco Tap – Mickleton 230 kV circuit	AEC (88.94%) / ConEd (1.04%) / JCPL (9.38%) / Neptune* (0.64%)
b0266	Replace two wave traps and ammeter at Peach Bottom, and two wave traps and ammeter at Newlinville 230 kV substations	PECO (100%)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)†
		<b>DFAX Allocation:</b> PECO (100%)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.1	Add a new 230 kV circuit between Whitpain and Heaton substations	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.2	Reconductor the Whitpain 1 – Plymtg 1 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.3	Convert the Heaton bus to a ring bus	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269.4	Reconductor the Heaton – Warminster 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.5	Reconductor Warminster – Buckingham 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.6	Add a new 500 kV breaker at Whitpain between #3 transformer and 5029 line	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> PECO (100%)
b0269.7	Replace North Wales 230 kV breaker #105	PECO (100%)
b0280.1	Install 161 MVAR capacitor at Warrington 230 kV substation	PECO 100%
b0280.2	Install 161 MVAR capacitor at Bradford 230 kV substation	PECO 100%
b0280.3	Install 28.8 MVAR capacitor at Warrington 34 kV substation	PECO 100%
b0280.4	Install 18 MVAR capacitor at Waverly 13.8 kV substation	PECO 100%

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†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0287	Install 600 MVAR Dynamic Reactive Device in Whitpain 500 kV vicinity	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.65%) / DPL (11.27%) / JCPL (15.28%) / NEPTUNE (0.01%) / PECO (67.73%) / PSEG (0.06%)</p>
b0351	Reconductor Tunnel – Grays Ferry 230 kV	PECO (100%)
b0352	Reconductor Tunnel – Parrish 230 kV	PECO (100%)
b0353.1	Install 2% reactors on both lines from Eddystone – Llanerch 138 kV	PECO (100%)
b0353.2	Install identical second 230/138 kV transformer in parallel with existing 230/138 kV transformer at Plymouth Meeting	PECO 100%
b0353.3	Replace Whitpain 230 kV breaker 135	PECO (100%)
b0353.4	Replace Whitpain 230 kV breaker 145	PECO (100%)
b0354	Eddystone – Island Road Upgrade line terminal equipment	PECO 100%
b0355	Reconductor Master – North Philadelphia 230 kV line	PECO 100%
b0357	Reconductor Buckingham – Pleasant Valley 230 kV	ConEd (1.05%) / JCPL (36.78%) / Neptune* (4.41%) / PSEG (53.57%) / RE (2.30%) / ECP** (1.89%)

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†† Cost allocations associated with below 500 kV elements of the project

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0359	Reconductor North Philadelphia – Waneeta 230 kV circuit	PECO 100%
b0402.1	Replace Whitpain 230 kV breaker #245	PECO (100%)
b0402.2	Replace Whitpain 230 kV breaker #255	PECO (100%)
b0438	Spare Whitpain 500/230 kV transformer	PECO (100%)
b0443	Spare Peach Bottom 500/230 kV transformer	PECO (100%)
b0505	Reconductor the North Wales – Whitpain 230 kV circuit	AEC (8.56%) / ConEd (0.21%) / DPL (7.74%) PECO (83.49%)
b0506	Reconductor the North Wales – Hartman 230 kV circuit	AEC (8.56%) / ConEd (0.21%) / DPL (7.74%) PECO (83.49%)
b0507	Reconductor the Jarrett – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) PECO (83.66%)
b0508.1	Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit	PECO (100%)
b0509	Reconductor the Jarrett – Heaton 230 kV circuit	PECO (100%)
b0727	Rebuild Bryn Mawr – Plymouth Meeting 138 kV line	AEC (1.25%) / DPL (3.11%) / PECO (95.64%)
b0789	Reconductor the line to provide a normal rating of 677 MVA and an emergency rating of 827 MVA	AEC (0.72%) / JCPL (17.36%) / NEPTUNE* (1.70%) / PECO (44.47%) / ECP** (0.92%) / PSEG (33.52%) / RE (1.31%)
b0790	Reconductor the Bradford – Planebrook 230 kV Ckt. 220-31 to provide a normal rating of 677 MVA and emergency rating of 827 MVA	JCPL (17.30%) / NEPTUNE* (1.69%) / PECO (45.09%) / ECP** (0.93%) / PSEG (33.68%) / RE (1.31%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0829.1	Replace Whitpain 230 kV breaker '155'		PECO (100%)
b1073	Install 2 new 230 kV breakers at Planebrook (on the 220-02 line terminal and on the 230 kV side of the #9 transformer)		PECO (100%)
b0829.2	Replace Whitpain 230 kV breaker '525'		PECO (100%)
b0829.3	Replace Whitpain 230 kV breaker '175'		PECO (100%)
b0829.4	Replace Plymouth Meeting 230 kV breaker '225'		PECO (100%)
b0829.5	Replace Plymouth Meeting 230 kV breaker '335'		PECO (100%)
b0841	Move the connection points for the 2nd Plymouth Meeting 230/138 kV XFMR		PECO (100%)
b0842	Install a 2nd 230/138 kV XFMR and 35 MVAR CAP at Heaton 138 kV bus		PECO (100%)
b0842.1	Replace Heaton 138 kV breaker '150'		PECO (100%)
b0843	Install a 75 MVAR CAP at Llanerch 138 kV bus		PECO (100%)
b0844	Move the connection point for the Llanerch 138/69 kV XFMR		PECO (100%)
b0887	Replace Richmond-Tacony 69 kV line		PECO (100%)
b0920	Replace station cable at Whitpain and Jarrett substations on the Jarrett - Whitpain 230 kV circuit		PECO (100%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1014.1	Replace Circuit breaker, Station Cable, CTs and Wave Trap at Eddystone 230 kV	PECO (100%)
b1014.2	Replace Circuit breaker, Station Cable, CTs Disconnect Switch and Wave Trap at Island Rd. 230 kV	PECO (100%)
b1015	Replace Breakers #115 and #125 at Printz 230 kV substation	PECO (100%)
b1156.1	Upgrade at Richmond 230 kV breaker '525'	PECO (100%)
b1156.2	Upgrade at Richmond 230 kV breaker '415'	PECO (100%)
b1156.3	Upgrade at Richmond 230 kV breaker '475'	PECO (100%)
b1156.4	Upgrade at Richmond 230 kV breaker '575'	PECO (100%)
b1156.5	Upgrade at Richmond 230 kV breaker '185'	PECO (100%)
b1156.6	Upgrade at Richmond 230 kV breaker '285'	PECO (100%)
b1156.7	Upgrade at Richmond 230 kV breaker '85'	PECO (100%)
b1156.8	Upgrade at Waneeta 230 kV breaker '425'	PECO (100%)
b1156.9	Upgrade at Emilie 230 kV breaker '815'	PECO (100%)
b1156.10	Upgrade at Plymouth Meeting 230 kV breaker '265'	PECO (100%)
b1156.11	Upgrade at Croydon 230 kV breaker '115'	PECO (100%)
b1156.12	Replace Emilie 138 kV breaker '190'	PECO (100%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1178	Add a second 230/138 kV transformer at Chichester. Add an inductor in series with the parallel transformers	JCPL (4.14%) / Neptune (0.44%) / PECO (82.19%) / ECP (0.33%) / HTP (0.32%) / PSEG (12.10%) / RE (0.48%)
b1179	Replace terminal equipment at Eddystone and Saville and replace underground section of the line	PECO (100%)
b1180.1	Replace terminal equipment at Chichester	PECO (100%)
b1180.2	Replace terminal equipment at Chichester	PECO (100%)
b1181	Install 230/138 kV transformer at Eddystone	PECO (100%)
b1182	Reconductor Chichester – Saville 138 kV line and upgrade terminal equipment	JCPL (5.08%) / Neptune (0.54%) / PECO (78.85%) / ECP (0.39%) / HTP (0.38%) / PSEG (14.20%) / RE (0.56%)
b1183	Replace 230/69 kV transformer #6 at Cromby. Add two 50 MVAR 230 kV banks at Cromby	PECO (100%)
b1184	Add 138 kV breakers at Cromby, Perkiomen, and North Wales; add a 35 MVAR capacitor at Perkiomen 138 kV	PECO (100%)
b1185	Upgrade Eddystone 230 kV breaker #365	PECO (100%)
b1186	Upgrade Eddystone 230 kV breaker #785	PECO (100%)
b1197	Reconductor the PECO portion of the Burlington – Croydon circuit	PECO (100%)
b1198	Replace terminal equipments including station cable, disconnects and relay at Conowingo 230 kV station	PECO (100%)
b1338	Replace Printz 230 kV breaker ‘225’	PECO (100%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1339	Replace Printz 230 kV breaker '315'	PECO (100%)
b1340	Replace Printz 230 kV breaker '215'	PECO (100%)
b1398.6	Reconductor the Camden – Richmond 230 kV circuit (PECO portion) and upgrade terminal equipments at Camden substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.8	Reconductor Richmond – Waneeta 230 kV and replace terminal equipments at Richmond and Waneeta substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.12	Replace Graysferry 230 kV breaker '115'	PECO (100%)
b1398.13	Upgrade Peach Bottom 500 kV breaker '225'	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)†
b1398.14	Replace Whitpain 230 kV breaker '105'	PECO (100%)
b1590.1	Upgrade the PECO portion of the Camden – Richmond 230 kV to a six wire conductor and replace terminal equipment at Richmond.	BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPCO (1.93%) / PPL (2.46%) / ECP** (0.16%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1591	Reconductor the underground portion of the Richmond – Waneeta 230 kV and replace terminal equipment	BGE (4.54%) / DL (0.27%) / ME (1.04%) / HTP (0.03%) / PECO (88.08%) / PEPCO (2.79%) / PPL (3.25%)
b1717	Install a second Waneeta 230/138 kV transformer on a separate bus section	HTP (0.04%) / PECO (99.96%)
b1718	Reconductor the Crescentville - Foxchase 138 kV circuit	PECO (100%)
b1719	Reconductor the Foxchase - Bluegrass 138 kV circuit	PECO (100%)
b1720	Increase the effective rating of the Eddystone 230/138 kV transformer by replacing a circuit breaker at Eddystone	PECO (100%)
b1721	Increase the rating of the Waneeta - Tuna 138 kV circuit by replacing two 138 kV CTs at Waneeta	PECO (100%)
b1722	Increase the normal rating of the Cedarbrook - Whitmarsh 69 kV circuit by changing the CT ratio and replacing station cable at Whitmarsh 69 kV	PECO (100%)
b1768	Install 39 MVAR capacitor at Cromby 138 kV bus	PECO (100%)
b1900	Add a 3rd 230 kV transmission line between Chichester and Linwood substations and remove the Linwood SPS	PECO (69.62%) / JCPL (6.02%) / ATSI (1.23%) / PSEG (20.83%) / RE (0.83%) / NEPTUNE* (0.59%) / ECP** (0.45%) / HTP (0.43%)
b2140	Install a 3rd Emilie 230/138 kV transformer	PECO (97.04%) / ECP** (1.62%) / HTP (1.34%)
b2145	Replace two sections of conductor inside Richmond substation	PECO (100%)

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## SCHEDULE 12 – APPENDIX

### (9) PPL Electric Utilities Corporation

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0074	Rebuild 12 miles of S. Akron – Berks 230 kV to double circuit, looping Met Ed's S. Lebanon – S. Reading line into Berks; replacement of S. Reading 230 kV breaker 107252	PPL (100%)
b0171.2	Replace wavetrapp at Hosensack 500kV substation to increase rating of Elroy - Hosensack 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.65%) / DPL (11.27%) / JCPL (15.28%) / NEPTUNE (0.01%) / PECO (67.73%) / PSEG (0.06%)</p>
b0172.1	Replace wave trap at Alburtis 500kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.23%) / ECP (1.70%) / HTP (1.45%) / JCPL (30.06%) / NEPTUNE (4.42%) / PECO (8.85%) / PSEG (46.40%) / RE (1.89%)</p>

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**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.2	Replace two wave traps at Juniata 500 kV – on the two Juniata – Airydale 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (6.58%) / ECP (0.88%) / HTP (0.82%) / JCPL (23.16%) / ME (12.80%) / NEPTUNE (2.33%) / PECO (23.16%) / PSEG (29.08%) / RE (1.19%)</p>
b0284.4	Changes at Juniata 500 kV substation	PPL (100%)
b0293.1	Replace wavetrapp at the Martins Creek 230 kV bus	PPL (100%)
b0293.2	Raise the operating temperature of the 2-1590 ACSR to 140C for the Martins Creek – Portland 230 kV circuit	PPL (100%)
b0440	Spare Juniata 500/230 kV transformer	PPL (100%)
b0468	Build a new substation with two 150 MVA transformers between Dauphin and Hummelstown 230/69 kV substations by sectionalizing the Middletown Junction – New Lebanon 230 kV line	JCPL (4.55%) / Neptune* (0.37%) / PECO (1.79%) / PENELEC (0.33%) / PPL (86.63%) / ECP** (0.18%) / PSEG (5.93%) / RE (0.22%)
b0469	Install 130 MVAR capacitor at West Shore 230 kV line	PPL (100%)

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**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0487  Build new 500 kV transmission facilities from Susquehanna to Pennsylvania – New Jersey border at Bushkill		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.43%) / HTP (2.73%) / JCPL (33.42%) / Neptune (3.79%) / PSEG (55.37%) / RE (2.26%)</p>
b0487.1  Install Lackawanna 500/230 kV transformer and upgrade 230 kV substation and switchyard		<p>PENELEC (16.90%) / PPL (77.59%) / ECP** (0.19%) / PSEG (5.13%) / RE (0.19%)</p>
b0500.1  Conastone – Otter Creek 230 kV – Reconductor approximately 17.2 miles of 795 kcmil ACSR with new 795 kcmil ACSS operated at 160 deg C		<p>AEC (6.27%) / DPL (8.65%) / JCPL (14.54%) / ME (10.59%) / Neptune* (1.37%) / PECO (15.66%) / PPL (21.02%) / ECP** (0.57%) / PSEG (20.56%) / RE (0.77%)</p>

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The Annual Revenue Requirements associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-8G.



## PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0558	Install 250 MVAR capacitor at Juniata 500 kV substation		AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0593	Eldred – Pine Grove 69 kV line Rebuild Part 2: 8 miles		PPL (100%)
b0595	Rebuild Lackawanna – Edella 69 kV line to double circuit		PPL (100%)
b0596	Reconductor and rebuild Stanton – Providence 69 kV #1 and #2 lines with 69 kV design; approximately 8 miles total		PPL (100%)
b0597	Reconductor Suburban – Providence 69 kV #1 and resectionalize the Suburban 69 kV lines		PPL (100%)
b0598	Reconductor Suburban Taps #1 and #2 for 69 kV line portions		PPL (100%)
b0600	Tripp Park Substation: 69 kV tap off Stanton – Providence 69 kV line #3 to new substation		PPL (100%)
b0601	Jessup Substation: New 138/69 kV tap off of Peckville – Jackson 138/69 kV line		PPL (100%)

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**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0604	Add 150 MVA, 230/138/69 transformer #6 to Harwood substation		PPL (100%)
b0605	Reconductor Stanton – Old Forge 69 kV line and resectionalize the Jenkins – Scranton 69 kV #1 and #2 lines		PPL (100%)
b0606	New 138 kV tap off Monroe – Jackson 138 kV #1 line to Bartonsville substation		PPL (100%)
b0607	New 138 kV taps off Monroe – Jackson 138 kV lines to Stroudsburg substation		PPL (100%)
b0608	New 138 kV tap off Siegfried – Jackson 138 kV #2 to transformer #2 at Gilbert substation		PPL (100%)
b0610	At South Farmersville substation, a new 69 kV tap off Nazareth – Quarry #2 to transformer #2		PPL (100%)
b0612	Rebuild Siegfried – North Bethlehem portion (6.7 miles) of Siegfried – Quarry 69 kV line		PPL (100%)
b0613	East Tannersville Substation: New 138 kV tap to new substation		PPL (100%)
b0614	Elroy substation expansion and new Elroy – Hatfield 138/69 kV double circuit lines (1.9 miles)		PPL (100%)
b0615	Reconductor and rebuild 12 miles of Seidersville – Quakerstown 138/69 kV and a new 75 MVA, 230/69 kV transformer #4		PPL (100%)
b0616	New Springfield 230/69 kV substation and transmission line connections		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0620	New 138 kV line and terminal at Monroe 230/138 substation		PPL (100%)
b0621	New 138 kV line and terminal at Siegfried 230/138 kV substation and add a second circuit to Siegfried – Jackson for 8.0 miles		PPL (100%)
b0622	138 kV yard upgrades and transmission line rearrangements at Jackson 138/69 kV substation		PPL (100%)
b0623	New West Shore – Whitehill Taps 138/69 kV double circuit line (1.3 miles)		PPL (100%)
b0624	Reconductor Cumberland – Wertzville 69 kV portion (3.7 miles) of Cumberland – West Shore 69 kV line		PPL (100%)
b0625	Reconductor Mt. Allen – Rossmoyne 69 kV portions (1.6 miles) of West Shore – Cumberland #3 and #4 lines		PPL (100%)
b0627	Replace UG cable from Walnut substation to Center City Harrisburg substation for higher ampacity (0.25 miles)		PPL (100%)
b0629	Lincoln substation: 69 kV tap to convert to modified Twin A		PPL (100%)
b0630	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild from Landisville Tap – Mt. Joy (2 miles)		PPL (100%)
b0631	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild to double circuit from Mt. Joy – Donegal (2 miles)		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0632	Terminate new S. Manheim – Donegal 69 kV circuit into S. Manheim 69 kV #3		PPL (100%)
b0634	Rebuild S. Manheim – Fuller 69 kV portion (1.0 mile) of S. Manheim – West Hempfield 69 kV #3 line into a 69 kV double circuit		PPL (100%)
b0635	Reconductor Fuller Tap – Landisville 69 kV (4.1 miles) into a 69 kV double circuit		PPL (100%)
b0703	Berks substation modification on Berks – South Akron 230 kV line. Modification will isolate the line fault on the South Akron line and will allow Berks transformer #2 to be energized by the South Lebanon 230 kV circuit		PPL (100%)
b0705	New Derry – Millville 69 kV line		PPL (100%)
b0707	Construct Bohemia – Twin Lakes 69 kV line, install a 10.9 MVAR capacitor bank near Bohemia 69 kV substation		PPL (100%)
b0708	New 69 kV double circuit from Jackson – Lake Naomi Tap		PPL (100%)
b0709	Install new 69 kV double circuit from Carlisle – West Carlisle		PPL (100%)
b0710	Install a third 69 kV line from Reese’s Tap to Hershey substation		PPL (100%)
b0711	New 69 kV that taps West Shore – Cumberland 69 kV #1 to Whitehill 69 kV substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0712	Construct a new 69 kV line between Strassburg Tap and the Millwood – Engleside 69 kV #1 line		PPL (100%)
b0713	Construct a new 138 kV double circuit line between Dillersville Tap and the West Hempfield – Prince 138 kV line		PPL (100%)
b0714	Prepare Roseville Tap for 138 kV conversion		PPL (100%)
b0715	Transfer S. Akron – S. Manheim #1 and #2 lines from the S. Akron 69 kV Yard to the S. Akron 138 kV Yard; Install switches on S. Akron – S. Manheim 138 kV #1 and #2 lines		PPL (100%)
b0716	Add a second 69 kV line from Morgantown – Twin Valley		PPL (100%)
b0717	Rebuild existing Brunner Island – West Shore 230 kV line and add a second Brunner Island – West Shore 230 kV line		PPL (100%)
b0718	SPS scheme to drop 190 MVA of 69 kV radial load at West Shore and 56 MVA of 69 kV radial load at Cumberland		PPL (100%)
b0719	SPS scheme at Jenkins substation to open the Stanton #1 and Stanton #2 230 kV circuit breakers after the second contingency		PPL (100%)
b0791	Add a fourth 230/69 kV transformer at Stanton		PENELEC (9.55%) / PPL (90.45%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b1074	Install motor operators on the Jenkins 230 kV '2W' disconnect switch and build out Jenkins Bay 3 and have MOD '3W' operated as normally open		PPL (100%)
b0881	Install motor operators on Susquehanna T21 - Susquehanna 230 kV line East CB at Susquehanna 230 kV switching station		PPL (100%)
b0908	Install motor operators at South Akron 230 kV		PPL (100%)
b0909	Convert Jenkins 230 kV yard into a 3-breaker ring bus		PPL (100%)
b0910	Install a second 230 kV line between Jenkins and Stanton		PPL (100%)
b0911	Install motor operators at Frackville 230 kV		PPL (100%)
b0912	Install 2, 10.8 MVAR capacitor banks at Scranton 69 kV		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0913	Extend Cando Tap to the Harwood-Jenkins #2 69 kV line		PPL (100%)
b0914	Build a 3rd 69 kV line from Harwood to Valmont Taps		PPL (100%)
b0915	Replace Walnut-Center City 69 kV cable		PPL (100%)
b0916	Reconductor Sunbury-Dalmatia 69 kV line		PPL (100%)
b1021	Install a new (#4) 138/69 kV transformer at Wescosville		PPL (100%)
b1196	Remove the Siegfried bus tie breaker and install a new breaker on the Martins Creek 230 kV line west bay to maintain two ties between the 230 kV buses		PPL (100%)
b1201	Rebuild the Hercules Tap to Double Circuit 69 kV		PPL (100%)
b1202	Mack-Macungie Double Tap, Single Feed Arrangement		PPL (100%)
b1203	Add the 2nd Circuit to the East Palmerton-Wagners-Lake Naomi 138/69 kV Tap		PPL (100%)
b1204	New Breinigsville 230-69 kV Substation		PPL (100%)
b1205	Siegfried-East Palmerton #1 69 kV Line- Install new 69 kV LSAB, Sectionalize, and Transfer Treichlers Substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1206	Siegfried-Quarry #1 & #2 69 kV Lines- Rebuild 3.3 mi from Quarry Substation to Macada Taps	PPL (100%)
b1209	Convert Neffsville Taps from 69 kV to 138 kV Operation	PPL (100%)
b1210	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 1 – operate on the 69 kV system)	PPL (100%)
b1211	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 2 – operate on the 138 kV system)	PPL (100%)
b1212	New 138 kV Taps to Flory Mill 138/69 kV Substation	PPL (100%)
b1213	Convert East Petersburg Taps from 69 kV to 138 kV operation, install two 10.8 MVAR capacitor banks	PPL (100%)
b1214	Terminate South Manheim-Donegal #2 at South Manheim, Reduce South Manheim 69 kV Capacitor Bank, Resectionalize 69 kV	PPL (100%)
b1215	Reconductor and rebuild 16 miles of Peckville-Varden 69 kV line and 4 miles of Blooming Grove-Honesdale 69 kV line	PPL (100%)
b1216	Build approximately 2.5 miles of new 69 kV transmission line to provide a “double tap – single feed” connection to Kimbles 69/12 kV substation	PPL (100%)
b1217	Provide a “double tap – single feed” connection to Tafton 69/12 kV substation	PPL (100%)



**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1524	Build a new Pocono 230/69 kV substation	PPL (100%)
b1524.1	Build approximately 14 miles new 230 kV South Pocono – North Pocono line	PPL (100%)
b1524.2	Install MOLSABs at Mt. Pocono substation	PPL (100%)
b1525	Build new West Pocono 230/69 kV Substation	PPL (100%)
b1525.1	Build approximately 14 miles new 230 kV Jenkins-West Pocono 230 kV Line	PPL (100%)
b1525.2	Install Jenkins 3E 230 kV circuit breaker	PPL (100%)
b1526	Install a new Honeybrook – Twin Valley 69/138 kV tie	PPL (100%)
b1527	Construct a new 230/69 kV North Lancaster substation. The sub will be supplied from the SAKR-BERK 230kV Line	PPL (100%)
b1527.1	Construct new 69/138 kV transmission from North Lancaster 230/69 kV sub to Brecknock and Honeybrook areas	PPL (100%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlerstown #1 & #2 69 kV lines at East Texas Substation	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1529	Add a double breaker 230 kV bay 3 at Hosensack		PPL (100%)
b1530	Replace Lock Haven 69kV ring bus with standard breaker and half design		PPL (100%)
b1532	Install new 32.4 MVAR capacitor bank at Sunbury		PPL (100%)
b1533	Rebuild Lycoming-Lock Haven #1 and Lycoming-Lock Haven #2 69kV lines		PPL (100%)
b1534	Rebuild 1.4 miles of the Sunbury-Milton 69kV		PPL (100%)
b1601	Re-configure the Breinigsville 500 kV substation with addition two 500 kV circuit breakers		AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)†
b1602	Re-configure the Elimsport 230 kV substation to breaker and half scheme and install 80 MVAR capacitor		PPL (100%)
b1740	Install a 90 MVAR cap bank on the Frackville 230 kV bus #207973		PPL (100%)
b1756	Install a 3rd West Shore 230/69 kV transformer		PPL (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1757	Install a 230 kV motor-operated air-break switch on the Clinton - Elimsport 230 kV line	PPL (100%)
b1758	Rebuild 1.65 miles of Columbia - Danville 69 kV line	PPL (100%)
b1759	Install a 69 kV 16.2 MVAR Cap at Milton substation	PPL (100%)
b1760	Install motor operated devices on the existing disconnect switches that are located on each side of all four 230 kV CBs at Stanton	PPL (100%)
b1761	Build a new Paupack - North 230 kV line (Approximately 21 miles)	PPL (100%)
b1762	Replace 3.7 miles of the existing 230 kV Blooming Grove - Peckville line by building 8.4 miles of new 230 kV circuit onto the Lackawanna - Hopatcong tower-line	PPL (100%)
b1763	Re-terminate the Peckville - Jackson and the Peckville - Varden 69 kV lines from Peckville into Lackawanna	PPL (100%)
b1764	Build a new 230-69 kV substations (Paupack)	PPL (100%)
b1765	Install a 16.2 MVAR capacitor bank at Bohemia 69-12 kV substation	PPL (100%)
b1766	Reconductor/rebuild 3.3 miles of the Siegfried - Quarry #1 and #2 lines	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1767	Install 6 motor-operated disconnect switches at Quarry substation		PPL (100%)
b1788	Install a new 500 kV circuit breaker at Wescosville		PPL (100%)
b1890	Add a second 230/69 kV transformer at North Pocono (NE/Pocono Reliability Project)		PPL (100%)
b1891	Build a new 230/138 kV Yard at Lackawanna (138 kV conversion from Lackawanna to Jenkins)		PPL (100%)
b1892	Rebuild the Throop Taps for 138 kV operation (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1893	Swap the Staton - Old Forge and Stanton - Brookside 69 kV circuits at Stanton (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1894	Rebuild and re-conductor 2.5 miles of the Stanton - Avoca 69 kV line		PPL (100%)
b1895	Rebuild and re-conductor 4.9 miles of the Stanton - Providence #1 69 kV line		PPL (100%)
b1896	Install a second 230/138 kV transformer and expand the 138 kV yard at Monroe		PPL (100%)
b1897	Build a new 230/138 kV substation at Jenkins (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1898	Install a 69 kV Tie Line between Richfield and Dalmatia substations		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b2004	Replace the CTs and switch in South Akron Bay 4 to increase the rating		PPL (100%)
b2005	Replace the CTs and switch in SAKR Bay 3 to increase the rating of the Millwood-South Akron 230 kV Line and of the rating in Bay 3		PPL (100%)
b2006	Install North Lancaster 500/230 kV substation (below 500 kV portion)		AEC (1.10%) / ECP** (0.37%) / HTP (0.37%) / JCPL (9.61%) / ME (19.42%) / Neptune* (0.75%) / PECO (6.01%) / PPL (50.57%) / PSEG (11.35%) / RE (0.45%)
b2006.1	Install North Lancaster 500/230 kV substation (500 kV portion)		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> BGE (16.09%) / ME (21.47%) / PPL (62.44%)
b2007	Install a 90 MVAR capacitor bank at the Frackville 230 kV Substation		PPL (100%)
b2158	Install 10.8 MVAR capacitor at West Carlisle 69/12 kV substation		PPL (100%)

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## SCHEDULE 12 – APPENDIX

### (10) Potomac Electric Power Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0146	Installation of (2) new 230 kV circuit breakers at Quince Orchard substation on circuits 23028 and 23029	PEPCO (100%)
b0219	Install two new 230 kV circuits between Palmers Corner and Blue Plains	PEPCO (100%)
b0228	Upgrade Burtonsville – Sandy Springs 230 kV circuit	PEPCO (100%)
b0238.1	Modify Dickerson Station H 230 kV	PEPCO (100%)
b0251	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0252	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0288	Brighton Substation – add 2 <sup>nd</sup> 1000 MVA 500/230 kV transformer, 2 500 kV circuit breakers and miscellaneous bus work	BGE (19.33%) / Dominion (17%) / PEPCO (63.67%)
b0319	Add a second 1000 MVA Bruches Hill 500/230 kV transformer	PEPCO (100%)
b0366	Install a 4 <sup>th</sup> Ritchie 230/69 kV transformer	PEPCO (100%)
b0367.1	Reconductor circuit “23035” for Dickerson – Quince Orchard 230 kV	AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)

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The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0367.2	Reconductor circuit “23033” for Dickerson – Quince Orchard 230 kV		AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)
b0375	Install 0.5% reactor at Dickerson on the Pleasant View – Dickerson 230 kV circuit		AEC (1.02%) / BGE (25.42%) / DPL (2.97%) / ME (1.72%) / PECO (3.47%) / PEPCO (65.40%)
b0467.1	Reconductor the Dickerson – Pleasant View 230 kV circuit		AEC (1.75%) / APS (19.66%) / BGE (22.09%) / ConEd (0.18%) / DPL (3.69%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.53%) / PEPCO (41.78%) / PPL (2.07%)
b0478	Reconductor the four circuits from Burches Hill to Palmers Corner		APS (1.68%) / BGE (1.83%) / PEPCO (96.49%)
b0496	Replace existing 500/230 kV transformer at Brighton		APS (5.67%) / BGE (29.68%) / Dominion (10.91%) / PEPCO (53.74%)
b0499	Install third Burches Hill 500/230 kV transformer		APS (3.54%) / BGE (7.31%) / PEPCO (89.15%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.7	Advance n0772 (Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.8	Advance n0773 (Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

\* Neptune Regional Transmission System, LLC

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.9	Advance n0774 (Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.10	Advance n0775 (Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.11	Advance n0776 (Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.12	Advance n0777 (Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

\* Neptune Regional Transmission System, LLC

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.13	Advance n0778 (Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.14	Advance n0779 (Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

\* Neptune Regional Transmission System, LLC

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.15	Advance n0780 (Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.16	Advance n0781 (Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.17	Advance n0782 (Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.18	Advance n0783 (Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.19	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.20	Advance n0785 (Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.21	Advance n0786 (Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.22	Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.23	Advance n0788 (Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.24	Advance n0789 (Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.25	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.26	Advance n0791 (Replace Chalk Point 230 Kv breaker (4C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.27	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.28	Advance n0793 (Replace Chalk Point 230 Kv breaker (6C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.29	Advance n0794 (Replace Chalk Point 230 Kv breaker (7C) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0526	Build two Ritchie – Benning Station A 230 kV lines	AEC (0.77%) / BGE (16.76%) / DPL (1.22%) / JCPL (1.39%) / ME (0.59%) / Neptune* (0.13%) / PECO (2.10%) / PEPCO (74.86%) / PSEG (2.10%) / RE (0.08%)
b0561	Install 300 MVAR capacitor at Dickerson Station “D” 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0562	Install 500 MVAR capacitor at Brighton 230 kV substation		AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0637	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0638	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0639	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0640	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0641	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0642	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0643	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0644	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0645	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0646	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0647	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0648	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0649	Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0701	Expand Benning 230 kV station, add a new 250 MVA 230/69 kV transformer at Benning Station 'A', new 115 kV Benning switching station		BGE (30.57%) / PEPCO (69.43%)
b0702	Add a second 50 MVAR 230 kV shunt reactor at the Benning 230 kV substation		PEPCO (100%)
b0720	Upgrade terminal equipment on both lines		PEPCO (100%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0721	Upgrade Oak Grove – Ritchie 23061 230 kV line	PEPCO (100%)
b0722	Upgrade Oak Grove – Ritchie 23058 230 kV line	PEPCO (100%)
b0723	Upgrade Oak Grove – Ritchie 23059 230 kV line	PEPCO (100%)
b0724	Upgrade Oak Grove – Ritchie 23060 230 kV line	PEPCO (100%)
b0730	Add slow oil circulation to the four Bells Mill Road – Bethesda 138 kV lines, add slow oil circulation to the two Buzzard Point – Southwest 138 kV lines; increasing the thermal ratings of these six lines allows for greater adjustment of the O Street phase shifters	PEPCO (100%)
b0731	Implement an SPS to automatically shed load on the 34 kV Bells Mill Road bus for this N-2 condition. The SPS will be in effect for 2013 and 2014 until a third Bells Mill 230/34 kV is placed in-service in 2015	PEPCO (100%)
b0746	Upgrade circuit for 3,000 amps using the ACCR	AEC (0.73%) / BGE (31.05%) / DPL (1.45%) / PECO (2.46%) / PEPCO (62.88%) / PPL (1.43%)
b0747	Upgrade terminal equipment on both lines: Quince Orchard - Bells Mill 230 kV (030) and (028)	PEPCO (100%)
b0802	Advance n0259 (Replace Dickerson Station H Circuit Breaker 412A)	PEPCO (100%)
b0803	Advance n0260 (Replace Dickerson Station H Circuit Breaker 42A)	PEPCO (100%)
b0804	Advance n0261 (Replace Dickerson Station H Circuit Breaker 42C)	PEPCO (100%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0805	Advance n0262 (Replace Dickerson Station H Circuit Breaker 43A)		PEPCO (100%)
b0806	Advance n0264 (Replace Dickerson Station H Circuit Breaker 44A)		PEPCO (100%)
b0809	Advance n0267 (Replace Dickerson Station H Circuit Breaker 45B)		PEPCO (100%)
b0810	Advance n0270 (Replace Dickerson Station H Circuit Breaker 47A)		PEPCO (100%)
b0811	Advance n0726 (Replace Dickerson Station H Circuit Breaker SPARE )		PEPCO (100%)
b0845	Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker		PEPCO (100%)
b0846	Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker		PEPCO (100%)
b0847	Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker		PEPCO (100%)
b0848	Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker		PEPCO (100%)
b0849	Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker		PEPCO (100%)
b0850	Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker		PEPCO (100%)
b0851	Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker		PEPCO (100%)
b0852	Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker		PEPCO (100%)
b0853	Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker		PEPCO (100%)
b0854	Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker		PEPCO (100%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0855	Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker		PEPCO (100%)
b0856	Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker		PEPCO (100%)
b0857	Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker		PEPCO (100%)
b0858	Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker		PEPCO (100%)
b0859	Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker		PEPCO (100%)
b0860	Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker		PEPCO (100%)
b0861	Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker		PEPCO (100%)
b0862	Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker		PEPCO (100%)
b0863	Replace Chalk Point 230 kV breaker (1C) with 80 kA breaker		PEPCO (100%)
b1104	Replace Burtonsville 230 kV breaker '1C'		PEPCO (100%)
b1105	Replace Burtonsville 230 kV breaker '2C'		PEPCO (100%)
b1106	Replace Burtonsville 230 kV breaker '3C'		PEPCO (100%)
b1107	Replace Burtonsville 230 kV breaker '4C'		PEPCO (100%)
b1125	Convert the 138 kV line from Buzzard 138 - Ritchie 851 to a 230 kV line and Remove 230/138 kV Transformer at Ritchie and install a spare 230/138 kV transformer at Buzzard Pt		APS (4.74%) / PEPCO (95.26%)
b1126	Upgrade the 230 kV line from Buzzard 016 – Ritchie 059		APS (4.74%) / PEPCO (95.26%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1592	Reconductor the Oak Grove – Bowie 230 kV circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations	AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1593	Reconductor the Bowie - Burtonsville 230 kV circuit and upgrade terminal equipments at Bowie and Burtonsville 230 kV substations	AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1594	Reconductor the Oak Grove – Bowie 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations	AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1595	Reconductor the Bowie – Burtonsville 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Burtonsville 230 kV substations	AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1596	Reconductor the Dickerson station “H” – Quince Orchard 230 kV ‘23032’ circuit and upgrade terminal equipments at Dickerson station “H” and Quince Orchard 230 kV substations	AEC (0.80%) / BGE (33.68%) / DPL (2.09%) / PECO (3.07%) / PEPCO (60.36%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.



**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1597	Reconductor the Oak Grove - Aquasco 230 kV '23062' circuit and upgrade terminal equipments at Oak Grove and Aquasco 230 kV substations		AEC (1.44%) / BGE (48.60%) / DPL (2.52%) / PECO (5.00%) / PEPCO (42.44%)
b2008	Reconductor feeder 23032 and 23034 to high temp. conductor (10 miles)		BGE (33.05%) / DPL (1.38%) / PECO (1.35%) / PEPCO (64.22%) /
b2136	Reconductor the Morgantown - V3-017 230 kV '23086' circuit and replace terminal equipments at Morgantown		PEPCO (100%)
b2137	Reconductor the Morgantown - Talbert 230 kV '23085' circuit and replace terminal equipment at Morgantown		PEPCO (100%)
b2138	Replace terminal equipments at Hawkins 230 kV substation		PEPCO (100%)

## SCHEDULE 12 – APPENDIX

### (12) Public Service Electric and Gas Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0025	Convert the Bergen-Leonia 138 Kv circuit to 230 kV circuit.	PSEG (100%)
b0090	Add 150 MVAR capacitor at Camden 230 kV	PSEG (100%)
b0121	Add 150 MVAR capacitor at Aldene 230 kV	PSEG (100%)
b0122	Bypass the Essex 138 kV series reactors	PSEG (100%)
b0125	Add Special Protection Scheme at Bridgewater to automatically open 230 kV breaker for outage of Branchburg – Deans 500 kV and Deans 500/230 kV #1 transformer	PSEG (100%)
b0126	Replace wavetrap on Branchburg – Flagtown 230 kV	PSEG (100%)
b0127	Replace terminal equipment to increase Brunswick – Adams – Bennetts Lane 230 kV to conductor rating	PSEG (100%)
b0129	Replace wavetrap on Flagtown – Somerville 230 kV	PSEG (100%)
b0130	Replace all derated Branchburg 500/230 kV transformers	AEC (1.36%) / ConEd (0.26%) / JCPL (47.63%) / PSEG (50.75%)
b0134	Upgrade or Retension PSEG portion of Kittatinny – Newton 230 kV circuit	JCPL (51.11%) / PSEG (45.96%) / RE (2.93%)

The Annual Revenue Requirement for all Public Service Electric and Gas Company Projects (Required Transmission Enhancements) in this Section 12 shall be as specified in Attachment 7 of Attachment H-10A and under the procedures detailed in Attachment H-10B.

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0145	Build new Essex – Aldene 230 kV cable connected through a phase angle regulator at Essex	PSEG (21.78%) / JCPL (73.45%) / RE (4.77%)
b0157	Add 100MVAR capacitor at West Orange 138kV substation	PSEG (100%)
b0158	Close the Sunnymeade "C" and "F" bus tie	PSEG (100%)
b0159	Make the Bayonne reactor permanent installation	PSEG (100%)
b0160	Relocate the X-2250 circuit from Hudson 1-6 bus to Hudson 7-12 bus	PSEG (100%)
b0161	Install 230/138kV transformer at Metuchen substation	PSEG (99.80%) / RE (0.20%)
b0162	Upgrade the Edison – Meadow Rd 138kV “Q” circuit	PSEG (100%)
b0163	Upgrade the Edison – Meadow Rd 138kV “R” circuit	PSEG (100%)
b0169	Build a new 230 kV section from Branchburg – Flagtown and move the Flagtown – Somerville 230 kV circuit to the new section	AEC (1.70%) / ConEd (1.06%) / JCPL (25.66%) / Neptune* (10.51%) / PSEG (58.96%) / ECP** (2.11%)
b0170	Reconductor the Flagtown-Somerville-Bridgewater 230 kV circuit with 1590 ACSS	JCLP (42.95%) / Neptune* (17.90%) / PSEG (38.36%) / RE (0.79%)

\* Neptune Regional Transmission System, LLC

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0172.2	Replace wave trap at Branchburg 500kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.23%) / ECP (1.70%) / HTP (1.45%) / JCPL (30.06%) / NEPTUNE (4.42%) / PECO (8.85%) / PSEG (46.40%) / RE (1.89%)</p>
b0184	Replace Hudson 230kV circuit breakers #1-2	PSEG (100%)
b0185	Replace Deans 230kV circuit breakers #9-10	PSEG (100%)
b0186	Replace Essex 230kV circuit breaker #5-6	PSEG (100%)
b1082	Install 230/138 kV transformer at Bergen substation	PENELEC (16.52%) / PSEG (80.29%) / RE (3.19%)

\* Neptune Regional Transmission System, LLC

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0201 Branchburg substation: replace wave trap on Branchburg – Readington 230 kV circuit		PSEG (100%)
b0213.1 Replace New Freedom 230 kV breaker BS2-6		PSEG (100%)
b0213.3 Replace New Freedom 230 kV breaker BS2-8		PSEG (100%)
b0274 Replace both 230/138 kV transformers at Roseland		ConEd (8.48%) / PSEG (88.56%) / ECP** (2.96%)
b0275 Upgrade the two 138 kV circuits between Roseland and West Orange		PSEG (100%)
b0278 Install 228 MVAR capacitor at Roseland 230 kV substation		PSEG (100%)
b0290 Install 400 MVAR capacitor in the Branchburg 500 kV vicinity		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (5.23%) / ECP (1.70%) / HTP (1.45%) / JCPL (30.06%) / NEPTUNE (4.42%) / PECO (8.85%) / PSEG (46.40%) / RE (1.89%)
b0358 Reconnector the PSEG portion of Buckingham – Pleasant Valley 230 kV, replace wave trap and metering transformer		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0368	Reconductor Tosco – G22_MTX 230 kV circuit with 1033 bundled ACSS		PSEG (100%)
b0371	Make the Metuchen 138 kV bus solid and upgrade 6 breakers at the Metuchen substation		PSEG (100%)
b0372	Make the Athenia 138 kV bus solid and upgrade 2 breakers at the Athenia substation		PSEG (100%)
b0395	Replace Hudson 230 kV breaker BS4-5		PSEG (100%)
b0396	Replace Hudson 230 kV breaker BS1-6		PSEG (100%)
b0397	Replace Hudson 230 kV breaker BS3-4		PSEG (100%)
b0398	Replace Hudson 230 kV breaker BS5-6		PSEG (100%)
b0401.1	Replace Roseland 230 kV breaker BS6-7		PSEG (100%)
b0401.2	Replace Roseland 138 kV breaker O-1315		PSEG (100%)
b0401.3	Replace Roseland 138 kV breaker S-1319		PSEG (100%)
b0401.4	Replace Roseland 138 kV breaker T-1320		PSEG (100%)
b0401.5	Replace Roseland 138 kV breaker G-1307		PSEG (100%)
b0401.6	Replace Roseland 138 kV breaker P-1316		PSEG (100%)
b0401.7	Replace Roseland 138 kV breaker 220-4		PSEG (100%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0401.8	Replace W. Orange 138 kV breaker 132-4	PSEG (100%)
b0411	Install 4 <sup>th</sup> 500/230 kV transformer at New Freedom	AEC (47.01%) / JCPL (7.04%) / Neptune* (0.28%) / PECO (23.36%) / PSEG (22.31%)
b0423	Reconductor Readington (2555) – Branchburg (4962) 230 kV circuit w/1590 ACSS	PSEG (100%)
b0424	Replace Readington wavetrap on Readington (2555) – Roseland (5017) 230 kV circuit	PSEG (100%)
b0425	Reconductor Linden (4996) – Tosco (5190) 230 kV circuit w/1590 ACSS (Assumes operating at 220 degrees C)	PSEG (100%)
b0426	Reconductor Tosco (5190) – G22_MTX5 (90220) 230 kV circuit w/1590 ACSS (Assumes operation at 220 degrees C)	PSEG (100%)
b0427	Reconductor Athenia (4954) – Saddle Brook (5020) 230 kV circuit river section	PSEG (100%)
b0428	Replace Roseland wavetrap on Roseland (5019) – West Caldwell “G” (5089) 138 kV circuit	PSEG (100%)
b0429	Reconductor Kittatinny (2553) – Newton (2535) 230 kV circuit w/1590 ACSS	JCPL (41.91%) / Neptune* (3.59%) / PSEG (50.59%) / RE (2.23%) / ECP** (1.68%)
b0439	Spare Deans 500/230 kV transformer	PSEG (100%)
b0446.1	Upgrade Bayway 138 kV breaker #2-3	PSEG (100%)
b0446.2	Upgrade Bayway 138 kV breaker #3-4	PSEG (100%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0446.3	Upgrade Bayway 138 kV breaker #6-7	PSEG (100%)
b0446.4	Upgrade the breaker associated with TX 132-5 on Linden 138 kV	PSEG (100%)
b0470	Install 138 kV breaker at Roseland and close the Roseland 138 kV buses	PSEG (100%)
b0471	Replace the wave traps at both Lawrence and Pleasant Valley on the Lawrence – Pleasant Vallen 230 kV circuit	PSEG (100%)
b0472	Increase the emergency rating of Saddle Brook – Athenia 230 kV by 25% by adding forced cooling	ConEd (1.64%) / ECP (2.03%) / PSEG (92.86%) / RE (3.47%)
b0473	Move the 150 MVAR mobile capacitor from Aldene 230 kV to Lawrence 230 kV substation	PSEG (100%)
b0489	Build new 500 kV transmission facilities from Pennsylvania – New Jersey border at Bushkill to Roseland	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)†
		<b>DFAX Allocation:</b> ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)
b489.1	Replace Athenia 230 kV breaker 31H	PSEG (100%)

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† Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

†† Cost allocations associated with below 500 kV elements of the project



# Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b489.2	Replace Bergen 230 kV breaker 10H	PSEG (100%)
b489.3	Replace Saddlebrook 230 kV breaker 21P	PSEG (100%)
b0489.4	Install two Roseland 500/230 kV transformers as part of the Susquehanna – Roseland 500 kV project	AEC (5.07%) / ComEd (0.29%) / ConEd (0.48%) / Dayton (0.03%) / DPL (1.75%) / JCPL (32.57%) / Neptune* (6.29%) / PECO (9.99%) / PENELEC (0.56%) / ECP** (0.95%) / PSEG (40.51%) / RE (1.51%) ††
b0489.5	Replace Roseland 230 kV breaker '42H' with 80 kA	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)
b0489.6	Replace Roseland 230 kV breaker '51H' with 80 kA	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.7	Replace Roseland 230 kV breaker '71H' with 80 kA	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)
b0489.8	Replace Roseland 230 kV breaker '31H' with 80 kA	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.9	Replace Roseland 230 kV breaker '11H' with 80 kA	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)
b0489.10	Replace Roseland 230 kV breaker '21H'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.72%) / HTP (3.41%) / JCPL (37.79%) / NEPTUNE (3.42%) / PSEG (50.60%) / RE (2.06%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.11	Replace Roseland 230 kV breaker '32H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.72%) / HTP (3.41%) / JCPL  (37.79%) / NEPTUNE (3.42%) /  PSEG (50.60%) / RE (2.06%)</p>
b0489.12	Replace Roseland 230 kV breaker '12H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.72%) / HTP (3.41%) / JCPL  (37.79%) / NEPTUNE (3.42%) /  PSEG (50.60%) / RE (2.06%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.13	Replace Roseland 230 kV breaker '52H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.72%) / HTP (3.41%) / JCPL  (37.79%) / NEPTUNE (3.42%) /  PSEG (50.60%) / RE (2.06%)</p>
b0489.14	Replace Roseland 230 kV breaker '41H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.72%) / HTP (3.41%) / JCPL  (37.79%) / NEPTUNE (3.42%) /  PSEG (50.60%) / RE (2.06%)</p>

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.15	Replace Roseland 230 kV breaker '72H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.72%) / HTP (3.41%) / JCPL  (37.79%) / NEPTUNE (3.42%) /  PSEG (50.60%) / RE (2.06%)</p>

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0498	Loop the 5021 circuit into New Freedom 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (14.30%) / ECP (1.14%) / HTP (0.98%) / JCPL (31.36%) / NEPTUNE (3.35%) / PSEG (46.96%) / RE (1.91%)</p>
b0498.1	Upgrade the 20H circuit breaker	PSEG (100%)
b0498.2	Upgrade the 22H circuit breaker	PSEG (100%)
b0498.3	Upgrade the 30H circuit breaker	PSEG (100%)
b0498.4	Upgrade the 32H circuit breaker	PSEG (100%)
b0498.5	Upgrade the 40H circuit breaker	PSEG (100%)
b0498.6	Upgrade the 42H circuit breaker	PSEG (100%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0565	Install 100 MVAR capacitor at Cox's Corner 230 kV substation	PSEG (100%)
b0578	Replace Essex 138 kV breaker 4LM (C1355 line to ECRRF)	PSEG (100%)
b0579	Replace Essex 138 kV breaker 1LM (220-1 TX)	PSEG (100%)
b0580	Replace Essex 138 kV breaker 1BM (BS1-3 tie)	PSEG (100%)
b0581	Replace Essex 138 kV breaker 2BM (BS3-4 tie)	PSEG (100%)
b0582	Replace Linden 138 kV breaker 3 (132-7 TX)	PSEG (100%)
b0592	Replace Metuchen 138 kV breaker '2-2 Transfer'	PSEG (100%)
b0664	Reconductor with 2x1033 ACSS conductor	JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0665	Reconductor with 2x1033 ACSS conductor	JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0668	Reconductor with 2x1033 ACSS conductor	JCPL (39.41%) / NEPTUNE* (20.38%) / PSEG (38.76%) / RE (1.45%)
b0671	Replace terminal equipment at both ends of line	PSEG (100%)
b0743	Add a bus tie breaker at Roseland 138 kV	PSEG (100%)
b0812	Increase operating temperature on line for one year to get 925E MVA rating	PSEG (100%)
b0813	Reconductor Hudson – South Waterfront 230 kV circuit	BGE (1.25%) / JCPL (9.92%) / NEPTUNE* (0.87%) / PEPCO (1.11%) / PSEG (83.73%) / RE (3.12%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814	New Essex – Kearney 138 kV circuit and Kearney 138 kV bus tie	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.1	Replace Kearny 138 kV breaker '1-SHT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.2	Replace Kearny 138 kV breaker '15HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.3	Replace Kearny 138 kV breaker '14HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.4	Replace Kearny 138 kV breaker '10HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.5	Replace Kearny 138 kV breaker '2HT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.6	Replace Kearny 138 kV breaker '22HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.7	Replace Kearny 138 kV breaker '4HT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.8	Replace Kearny 138 kV breaker '25HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.9	Replace Essex 138 kV breaker '2LM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.10	Replace Essex 138 kV breaker '1BT' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.11	Replace Essex 138 kV breaker '2PM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.12	Replace Marion 138 kV breaker '2HM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.13	Replace Marion 138 kV breaker '2LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.14	Replace Marion 138 kV breaker '1LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.15	Replace Marion 138 kV breaker '6PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.16	Replace Marion 138 kV breaker '3PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.17	Replace Marion 138 kV breaker '4LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.18	Replace Marion 138 kV breaker '3LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.19	Replace Marion 138 kV breaker '1HM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.20	Replace Marion 138 kV breaker '2PM3' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.21	Replace Marion 138 kV breaker '2PM1' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.22	Replace ECRR 138 kV breaker '903'	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.23	Replace Foundry 138 kV breaker '21P'	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.24	Change the contact parting time on Essex 138 kV breaker '3LM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.25	Change the contact parting time on Essex 138 kV breaker '2BM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.26	Change the contact parting time on Essex 138 kV breaker '1BM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.27	Change the contact parting time on Essex 138 kV breaker '3PM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.28	Change the contact parting time on Essex 138 kV breaker '4LM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.29	Change the contact parting time on Essex 138 kV breaker '1PM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.30	Change the contact parting time on Essex 138 kV breaker '1LM' to 2.5 cycles	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0829	Build Branchburg to Roseland 500 kV circuit as part of Branchburg – Hudson 500 kV project	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0829.6	Replace Branchburg 500 kV breaker 91X	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> PSEG (96.08%) / RE (3.92%)
b0829.9	Replace Branchburg 230 kV breaker 102H	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0829.11	Replace Branchburg 230 kV breaker 32H		PSEG (100%)
b0829.12	Replace Branchburg 230 kV breaker 52H		PSEG (100%)
b0830	Build Roseland - Hudson 500 kV circuit as part of Branchburg – Hudson 500 kV project		AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0830.1	Replace Roseland 230 kV breaker '82H' with 80 kA		PSEG (100%)
b0830.2	Replace Roseland 230 kV breaker '91H' with 80 kA		PSEG (100%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0830.3	Replace Roseland 230 kV breaker '22H' with 80 kA	PSEG (100%)
b0831	Replace 138/13 kV transformers with 230/13 kV units as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0832	Build Hudson 500 kV switching station as part of Branchburg – Hudson 500 kV project	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0833	Build Roseland 500 kV switching station as part of Branchburg – Hudson 500 kV project	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0834	Convert the E-1305/F-1306 to one 230 kV circuit as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0835	Build Hudson 230 kV transmission lines as part of Roseland – Hudson 500 kV project as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0836	Install transformation at new Hudson 500 kV switching station and perform Hudson 230 kV and 345 kV station work as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0882	Replace Hudson 230 kV breaker 1HA with 80 kA	PSEG (100%)
b0883	Replace Hudson 230 kV breaker 2HA with 80 kA	PSEG (100%)
b0884	Replace Hudson 230 kV breaker 3HB with 80 kA	PSEG (100%)
b0885	Replace Hudson 230 kV breaker 4HA with 80 kA	PSEG (100%)
b0886	Replace Hudson 230 kV breaker 4HB with 80 kA	PSEG (100%)
b0889	Replace Bergen 230 kV breaker '21H'	PSEG (100%)
b0890	Upgrade New Freedom 230 kV breaker '21H'	PSEG (100%)
b0891	Upgrade New Freedom 230 kV breaker '31H'	PSEG (100%)
b0899	Replace ECRR 138 kV breaker 901	PSEG (100%)
b0900	Replace ECRR 138 kV breaker 902	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1013	Replace Linden 138 kV breaker '7PB'		PSEG (100%)
b1017	Reconductor South Mahwah - Waldwick 345 kV J-3410 circuit		ConEd (49.36%) / JCPL (14.69%) / NEPTUNE* (1.39%) / PSEG (32.84%) / RE (1.28%) / ECP** (0.44%)
b1018	Reconductor South Mahwah - Waldwick 345 kV K-3411 circuit		ConEd (49.38%) / JCPL (14.77%) / NEPTUNE* (1.39%) / PSEG (32.74%) / RE (1.28%) / ECP** (0.44%)
b1019.1	Replace wave trap, line disconnect and ground switch at Roseland on the F-2206 circuit		PSEG (100%)
b1019.2	Replace wave trap, line disconnect and ground switch at Roseland on the B-2258 circuit		PSEG (100%)
b1019.3	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.4	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the B-2258 circuit		PSEG (100%)
b1019.5	Replace wave trap, line disconnect and ground switch at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.6	Replace line disconnect and ground switch at Cedar Grove on the K-2263 circuit		PSEG (100%)
b1019.7	Replace 2-4 and 4-5 section disconnect and ground switches at Clifton on the B-2258 circuit		PSEG (100%)
b1019.8	Replace 1-2 and 2-3 section disconnect and ground switches at Clifton on the K-2263 circuit		PSEG (100%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1019.9	Replace line, ground, 230 kV main bus disconnects at Athenia on the B-2258 circuit	PSEG (100%)
b1019.10	Replace wave trap, line, ground 230 kV breaker disconnect and 230 kV main bus disconnects at Athenia on the K-2263 circuit	PSEG (100%)
b1082.1	Replace Bergen 138 kV breaker '30P' with 80 kA	PSEG (100%)
b1082.2	Replace Bergen 138 kV breaker '80P' with 80 kA	PSEG (100%)
b1082.3	Replace Bergen 138 kV breaker '70P' with 80 kA	PSEG (100%)
b1082.4	Replace Bergen 138 kV breaker '90P' with 63 kA	PSEG (100%)
b1082.5	Replace Bergen 138 kV breaker '50P' with 63 kA	PSEG (100%)
b1082.6	Replace Bergen 230 kV breaker '12H' with 80 kA	PSEG (100%)
b1082.7	Replace Bergen 230 kV breaker '21H' with 80 kA	PSEG (100%)
b1082.8	Replace Bergen 230 kV breaker '11H' with 80 kA	PSEG (100%)
b1082.9	Replace Bergen 230 kV breaker '20H' with 80 kA	PSEG (100%)
b1098	Re-configure the Bayway 138 kV substation and install three new 138 kV breakers	PSEG (100%)
b1099	Build a new 230 kV substation by tapping the Aldene – Essex circuit and install three 230/26 kV transformers, and serve some of the Newark area load from the new station	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1100	Build a new 138 kV circuit from Bayonne to Marion		PSEG (100%)
b1101	Re-configure the Cedar Grove substation with breaker and half scheme and build a new 69 kV circuit from Cedar Grove to Hinchman		PSEG (100%)
b1154	Convert the West Orange 138 kV substation, the two Roseland – West Orange 138 kV circuits, and the Roseland – Sewaren 138 kV circuit from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1155	Build a new 230 kV circuit from Branchburg to Middlesex Sw. Rack. Build a new 230 kV substation at Middlesex		JCPL (4.61%) / PSEG (91.75%) / RE (3.64%)
b1155.3	Replace Branchburg 230 kV breaker '81H' with 63 kA		PSEG (100%)
b1155.4	Replace Branchburg 230 kV breaker '72H' with 63 kA		PSEG (100%)
b1155.5	Replace Branchburg 230 kV breaker '61H' with 63 kA		PSEG (100%)
b1155.6	Replace Branchburg 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156	Convert the Burlington, Camden, and Cuthbert Blvd 138 kV substations, the 138 kV circuits from Burlington to Camden, and the 138 kV circuit from Camden to Cuthbert Blvd. from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1156.13	Replace Camden 230 kV breaker '22H' with 80 kA		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1156.14	Replace Camden 230 kV breaker '32H' with 80 kA		PSEG (100%)
b1156.15	Replace Camden 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1156.16	Replace New Freedom 230 kV breaker '50H' with 63 kA		PSEG (100%)
b1156.17	Replace New Freedom 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156.18	Replace New Freedom 230 kV breaker '51H' with 63 kA		PSEG (100%)
b1156.19	Rebuild Camden 230 kV to 80 kA		PSEG (100%)
b1156.20	Rebuild Burlington 230 kV to 80 kA		PSEG (100%)
b1197.1	Reconductor the PSEG portion of the Burlington – Croydon circuit with 1590 ACSS		PSEG (100%)
b1228	Re-configure the Lawrence 230 kV substation to breaker and half		HTP (0.14%) / ECP (0.22%) / PSEG (95.83%) / RE (3.81%)
b1255	Build a new 69 kV substation (Ridge Road) and build new 69 kV circuits from Montgomery – Ridge Road – Penns Neck/Dow Jones		PSEG (96.18%) / RE (3.82%)
b1304.1	Convert the existing 'D1304' and 'G1307' 138 kV circuits between Roseland – Kearny – Hudson to 230 kV operation		AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1304.2	Expand existing Bergen 230 kV substation and reconfigure the Athenia 230 kV substation to breaker and a half scheme	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.3	Build second 230 kV underground cable from Bergen to Athenia	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.4	Build second 230 kV underground cable from Hudson to South Waterfront	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.5	Replace Athenia 230 kV breaker '21H' with 80 kA	PSEG (100%)
b1304.6	Replace Athenia 230 kV breaker '41H' with 80 kA	PSEG (100%)
b1304.7	Replace South Waterfront 230 kV breaker '12H' with 80 kA	PSEG (100%)
b1304.8	Replace South Waterfront 230 kV breaker '22H' with 80 kA	PSEG (100%)
b1304.9	Replace South Waterfront 230 kV breaker '32H' with 80 kA	PSEG (100%)
b1304.10	Replace South Waterfront 230 kV breaker '52H' with 80 kA	PSEG (100%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.11	Replace South Waterfront 230 kV breaker '62H' with 80 kA		PSEG (100%)
b1304.12	Replace South Waterfront 230 kV breaker '72H' with 80 kA		PSEG (100%)
b1304.13	Replace South Waterfront 230 kV breaker '82H' with 80 kA		PSEG (100%)
b1304.14	Replace Essex 230 kV breaker '20H' with 80 kA		PSEG (100%)
b1304.15	Replace Essex 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.16	Replace Essex 230 kV breaker '10H' with 80 kA		PSEG (100%)
b1304.17	Replace Essex 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1304.18	Replace Essex 230 kV breaker '11HL' with 80 kA		PSEG (100%)
b1304.19	Replace Newport R 230 kV breaker '23H' with 63 kA		PSEG (100%)
b1304.20	Rebuild Athenia 230 kV substation to 80 kA		PSEG (100%)
b1304.21	Rebuild Bergen 230 kV substation to 80 kA		PSEG (100%)
b1398	Build two new parallel underground circuits from Gloucester to Camden		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.1	Install shunt reactor at Gloucester to offset cable charging		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.2	Reconfigure the Cuthbert station to breaker and a half scheme	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.3	Build a second 230 kV parallel overhead circuit from Mickelton – Gloucester	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.4	Reconductor the existing Mickleton – Gloucester 230 kV circuit (PSEG portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.7	Reconductor the Camden – Richmond 230 kV circuit (PSEG portion) and upgrade terminal equipments at Camden substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.15	Replace Gloucester 230 kV breaker '21H' with 63 kA	PSEG (100%)
b1398.16	Replace Gloucester 230 kV breaker '51H' with 63 kA	PSEG (100%)
b1398.17	Replace Gloucester 230 kV breaker '56H' with 63 kA	PSEG (100%)
b1398.18	Replace Gloucester 230 kV breaker '26H' with 63 kA	PSEG (100%)
b1398.19	Replace Gloucester 230 kV breaker '71H' with 63 kA	PSEG (100%)
b1399	Convert the 138 kV path from Aldene – Springfield Rd. – West Orange to 230 kV	PSEG (96.18%) / RE (3.82%)
b1400	Install 230 kV circuit breakers at Bennetts Ln. “F” and “X” buses	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1410	Replace Salem 500 kV breaker '11X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%)  / APS (5.89%) / ATSI (7.59%)  / BGE (4.12%) / ComEd  (12.38%) / ConEd (0.55%) /  Dayton (2.02%) / DEOK  (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP***  (0.20%) / JCPL (3.57%) / ME  (1.72%) / NEPTUNE* (0.41%)  / PECO (4.97%) / PENELEC  (1.86%) / PEPCO (3.85%) /  PPL (4.95%) / PSEG (5.89%) /  RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.08%) / RE (3.92%)</p>
b1411	Replace Salem 500 kV breaker '12X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%)  / APS (5.89%) / ATSI (7.59%)  / BGE (4.12%) / ComEd  (12.38%) / ConEd (0.55%) /  Dayton (2.02%) / DEOK  (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP***  (0.20%) / JCPL (3.57%) / ME  (1.72%) / NEPTUNE* (0.41%)  / PECO (4.97%) / PENELEC  (1.86%) / PEPCO (3.85%) /  PPL (4.95%) / PSEG (5.89%) /  RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.08%) / RE (3.92%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1412	Replace Salem 500 kV breaker '20X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%)  / APS (5.89%) / ATSI (7.59%)  / BGE (4.12%) / ComEd  (12.38%) / ConEd (0.55%) /  Dayton (2.02%) / DEOK  (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP***  (0.20%) / JCPL (3.57%) / ME  (1.72%) / NEPTUNE* (0.41%)  / PECO (4.97%) / PENELEC  (1.86%) / PEPCO (3.85%) /  PPL (4.95%) / PSEG (5.89%) /  RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.08%) / RE (3.92%)</p>
b1413	Replace Salem 500 kV breaker '21X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%)  / APS (5.89%) / ATSI (7.59%)  / BGE (4.12%) / ComEd  (12.38%) / ConEd (0.55%) /  Dayton (2.02%) / DEOK  (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP***  (0.20%) / JCPL (3.57%) / ME  (1.72%) / NEPTUNE* (0.41%)  / PECO (4.97%) / PENELEC  (1.86%) / PEPCO (3.85%) /  PPL (4.95%) / PSEG (5.89%) /  RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.08%) / RE (3.92%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1414	Replace Salem 500 kV breaker '31X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd  (12.38%) / ConEd (0.55%) /  Dayton (2.02%) / DEOK  (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP***  (0.20%) / JCPL (3.57%) / ME  (1.72%) / NEPTUNE* (0.41%)  / PECO (4.97%) / PENELEC  (1.86%) / PEPCO (3.85%) /  PPL (4.95%) / PSEG (5.89%) /  RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.08%) / RE (3.92%)</p>
b1415	Replace Salem 500 kV breaker '32X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd  (12.38%) / ConEd (0.55%) /  Dayton (2.02%) / DEOK  (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP***  (0.20%) / JCPL (3.57%) / ME  (1.72%) / NEPTUNE* (0.41%)  / PECO (4.97%) / PENELEC  (1.86%) / PEPCO (3.85%) /  PPL (4.95%) / PSEG (5.89%) /  RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.08%) / RE (3.92%)</p>

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1539	Replace Tosco 230 kV breaker 'CB1' with 63 kA		PSEG (100%)
b1540	Replace Tosco 230 kV breaker 'CB2' with 63 kA		PSEG (100%)
b1541	Open the Hudson 230 kV bus tie		PSEG (100%)
b1588	Reconductor the Eagle Point - Gloucester 230 kV circuit #1 and #2 with higher conductor rating		JCPL (10.31%) / Neptune* (0.98%) / HTP (0.75%) / PECO (30.81%) / ECP** (0.82%) / PSEG (54.17%) / RE (2.16%)
b1589	Re-configure the Kearny 230 kV substation and loop the P-2216-1 (Essex - NJT Meadows) 230 kV circuit		ATSI (8.00%) / HTP (20.18%) / PENELEC (7.77%) / PSEG (61.59%) / RE (2.46%)
b1590	Upgrade the PSEG portion of the Camden Richmond 230 kV circuit to six wire conductor and replace terminal equipment at Camden		BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPSCO (1.93%) / PPL (2.46%) / ECP** (0.16%)
b1749	Advance n1237 (Replace Essex 230 kV breaker '22H' with 80kA)		PSEG (100%)
b1750	Advance n0666.5 (Replace Hudson 230 kV breaker '1HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1751	Advance n0666.3 (Replace Hudson 230 kV breaker '2HA' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1752	Advance n0666.10 (Replace Hudson 230 kV breaker '2HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)

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## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1753	Marion 138 kV breaker '7PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1754	Marion 138 kV breaker '3PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1755	Marion 138 kV breaker '6PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1787	Build a second 230 kV circuit from Cox's Corner - Lumberton	AEC (4.96%) / JCPL (44.20%) / NEPTUNE* (0.53%) / HTP (0.15%) / ECP** (0.16%) / PSEG (48.08%) / RE (1.92%)
b2034	Install a reactor along the Kearny - Essex 138 kV line	PSEG (100%)
b2035	Replace Sewaren 138 kV breaker '11P'	PSEG (100%)
b2036	Replace Sewaren 138 kV breaker '21P'	PSEG (100%)
b2037	Replace PVSC 138 kV breaker '452'	PSEG (100%)
b2038	Replace PVSC 138 kV breaker '552'	PSEG (100%)
b2039	Replace Bayonne 138 kV breaker '11P'	PSEG (100%)
b2139	Reconductor the Mickleton - Gloucester 230 kV parallel circuits with double bundle conductor	PSEG (61.11%) / PECO (36.45%) / RE (2.44%)
b2146	Re-configure the Brunswick 230 kV and 69 kV substations	PSEG (96.16%) / RE (3.84%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2151	Construct Jackson Rd. 69 kV substation and loop the Cedar Grove - Hinchmans Ave into Jackson Rd. and construct Hawthorne 69 kV substation and build 69 kV circuit from Hinchmans Ave - Hawthorne - Fair Lawn	PSEG (100%)
b2159	Reconfigure the Linden, Bayway, North Ave, and Passaic Valley S.C. 138 kV substations. Construct and loop new 138 kV circuit to new airport station	PSEG (72.61%) / HTP (24.49%) / RE (2.90%)

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## SCHEDULE 12 – APPENDIX

### (14) Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0216	Install -100/+525 MVAR dynamic reactive device at Black Oak	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (40.18%) / BGE (13.21%) / Dominion (25.51%) / PEPCO (21.10%)
b0218	Install third Wylie Ridge 500/345kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		AEC (11.62%) / ConEd (1.79%) / DPL (19.05%) / Dominion (13.56%) / JCPL (15.28%) / PECO (38.70%)
b0220	Upgrade coolers on Wylie Ridge 500/345 kV #7	
		AEC (11.62%) / ConEd (1.79%) / DPL (19.05%) / Dominion (13.56%) / JCPL (15.28%) / PECO (38.70%)
b0229	Install fourth Bedington 500/138 kV	
		APS (50.98%) / BGE (13.42%) / DPL (2.03%) / Dominion (14.50%) / ME (1.43%) / PEPCO (17.64%)
b0230	Install fourth Meadowbrook 500/138 kV	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		APS (79.16%) / BGE (3.61%) / DPL (0.86%) / Dominion (11.75%) / ME (0.67%) / PEPCO (3.95%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0238	Reconductor Doubs – Dickerson and Doubs – Aqueduct 1200 MVA	As specified under the procedures detailed in Attachment H-18B, Section 1.b	BGE (16.66%) / Dominion (33.66%) / PEPCO (49.68%)
b0240	Open the Black Oak #3 500/138 kV transformer for the loss of Hatfield – Back Oak 500 kV line		APS (100%)
b0245	Replacement of the existing 954 ACSR conductor on the Bedington – Nipetown 138 kV line with high temperature/low sag conductor		APS (100%)
b0246	Rebuild of the Double Tollgate – Old Chapel 138 kV line with 954 ACSR conductor	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)
b0273	Open both North Shenandoah #3 transformer and Strasburg – Edinburgh 138 kV line for the loss of Mount Storm – Meadowbrook 572 500 kV		APS (100%)
b0322	Convert Lime Kiln substation to 230 kV operation		APS (100%)
b0323	Replace the North Shenandoah 138/115 kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)

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†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.2	Build new Meadow Brook – Loudoun 500 kV circuit (20 of 50 miles)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  BGE (7.93%) / Dominion (76.09%) / PEPCO (15.98%)</p>
b0343	Replace Doubs 500/230 kV transformer #2	<p>As specified under the procedures detailed in Attachment H-18B, Section 1.b</p> <p>AEC (1.85%) / BGE (21.49%) / DPL (3.91%) / Dominion (28.86%) / ME (2.97%) / PECO (5.73%) / PEPCO (35.19%)</p>
b0344	Replace Doubs 500/230 kV transformer #3	<p>As specified under the procedures detailed in Attachment H-18B, Section 1.b</p> <p>AEC (1.86%) / BGE (21.50%) / DPL (3.91%) / Dominion (28.82%) / ME (2.97%) / PECO (5.74%) / PEPCO (35.20%)</p>
b0345	Replace Doubs 500/230 kV transformer #4	<p>As specified under the procedures detailed in Attachment H-18B, Section 1.b</p> <p>AEC (1.85%) / BGE (21.49%) / DPL (3.90%) / Dominion (28.83%) / ME (2.98%) / PECO (5.75%) / PEPCO (35.20%)</p>



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.1	Build new Mt. Storm – 502 Junction 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.2	Build new Mt. Storm – Meadow Brook 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.3	Build new 502 Junction 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.4	Upgrade Meadow Brook 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b

**Load-Ratio Share Allocation:**  
AEC (1.57%) / AEP (15.18%) /  
APS (5.89%) / ATSI (7.59%) /  
BGE (4.12%) / ComEd (12.38%)  
/ ConEd (0.55%) / Dayton  
(2.02%) / DEOK (3.15%) / DL  
(1.72%) / DPL (2.53%) /  
Dominion (13.30%) / EKPC  
(2.14%) / HTP\*\*\* (0.20%) /  
JCPL (3.57%) / ME (1.72%) /  
NEPTUNE\* (0.41%) / PECO  
(4.97%) / PENELEC (1.86%) /  
PEPCO (3.85%) / PPL (4.95%) /  
PSEG (5.89%) / RE (0.24%) /  
ECP\*\* (0.20%)

**DFAX Allocation:**  
(APS 36.47%) / BGE (19.13%) /  
PEPCO (44.40%)

**Load-Ratio Share Allocation:**  
AEC (1.57%) / AEP (15.18%) /  
APS (5.89%) / ATSI (7.59%) /  
BGE (4.12%) / ComEd (12.38%)  
/ ConEd (0.55%) / Dayton  
(2.02%) / DEOK (3.15%) / DL  
(1.72%) / DPL (2.53%) /  
Dominion (13.30%) / EKPC  
(2.14%) / HTP\*\*\* (0.20%) /  
JCPL (3.57%) / ME (1.72%) /  
NEPTUNE\* (0.41%) / PECO  
(4.97%) / PENELEC (1.86%) /  
PEPCO (3.85%) / PPL (4.95%) /  
PSEG (5.89%) / RE (0.24%) /  
ECP\*\* (0.20%)

**DFAX Allocation:**  
APS (30.37%) / Dominion  
(46.46%) / PEPCO (23.17%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.5	Replace Harrison 500 kV breaker HL-3	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%)  / ConEd (0.55%) / Dayton  (2.02%) / DEOK (3.15%) / DL  (1.72%) / DPL (2.53%) /  Dominion (13.30%) / EKPC  (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  (APS 36.47%) / BGE (19.13%) /  PEPCO (44.40%)</p>
b0347.6	Upgrade (per ABB inspection) breaker HL-6	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%)  / ConEd (0.55%) / Dayton  (2.02%) / DEOK (3.15%) / DL  (1.72%) / DPL (2.53%) /  Dominion (13.30%) / EKPC  (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  (APS 36.47%) / BGE (19.13%) /  PEPCO (44.40%)</p>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.7	Upgrade (per ABB inspection) breaker HL-7	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> (APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)
b0347.8	Upgrade (per ABB inspection) breaker HL-8	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> (APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.9	Upgrade (per ABB inspection) breaker HL-10	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> (APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)
b0347.10	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-1	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> (APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.11	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-3	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> (APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)
b0347.12	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-4	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> (APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.13	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-6	<div> <b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) /  DPL (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%) </div> <div> <b>DFAX Allocation:</b>  (APS 36.47%) / BGE (19.13%) /  PEPCO (44.40%) </div>
b0347.14	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-7	<div> <b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) /  DPL (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%) </div> <div> <b>DFAX Allocation:</b>  (APS 36.47%) / BGE (19.13%) /  PEPCO (44.40%) </div>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.15	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-9	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> (APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)
b0347.16	Upgrade (per ABB inspection) Harrison 500 kV breaker 'HL-3'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> (APS 36.47%) / BGE (19.13%) / PEPCO (44.40%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.17	Replace Meadow Brook 138 kV breaker 'MD-10'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)
b0347.18	Replace Meadow Brook 138 kV breaker 'MD-11'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.19	Replace Meadow Brook 138 kV breaker 'MD-12'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)
b0347.20	Replace Meadow Brook 138 kV breaker 'MD-13'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.21	Replace Meadow Brook 138 kV breaker 'MD-14'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)
b0347.22	Replace Meadow Brook 138 kV breaker 'MD-15'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.23	Replace Meadow Brook 138 kV breaker 'MD-16'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)
b0347.24	Replace Meadow Brook 138 kV breaker 'MD-17'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.25	Replace Meadow Brook 138 kV breaker 'MD-18'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)
b0347.26	Replace Meadow Brook 138 kV breaker 'MD-22#1 CAP'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.27	Replace Meadow Brook 138 kV breaker 'MD-4'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)
b0347.28	Replace Meadow Brook 138 kV breaker 'MD-5'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)

\*Neptune Regional Transmission System, LLC

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.29	Replace Meadowbrook 138 kV breaker 'MD-6'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)
b0347.30	Replace Meadowbrook 138 kV breaker 'MD-7'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.31	Replace Meadowbrook 138 kV breaker 'MD-8'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)
b0347.32	Replace Meadowbrook 138 kV breaker 'MD-9'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0347.33	Replace Meadow Brook 138kV breaker 'MD-1'		APS (100%)
b0347.34	Replace Meadow Brook 138kV breaker 'MD-2'		APS (100%)
b0348	Upgrade Stonewall – Inwood 138 kV with 954 ACSR conductor		APS (100%)
b0373	Convert Doubs – Monocacy 138 kV facilities to 230 kV operation		AEC (1.82%) / APS (76.84%) / DPL (2.64%) / JCPL (4.53%) / ME (9.15%) / Neptune* (0.42%) / PPL (4.60%)
b0393	Replace terminal equipment at Harrison 500 kV and Belmont 500 kV		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0406.1	Replace Mitchell 138 kV breaker “#4 bank”	APS (100%)
b0406.2	Replace Mitchell 138 kV breaker “#5 bank”	APS (100%)
b0406.3	Replace Mitchell 138 kV breaker “#2 transf”	APS (100%)
b0406.4	Replace Mitchell 138 kV breaker “#3 bank”	APS (100%)
b0406.5	Replace Mitchell 138 kV breaker “Charlerio #2”	APS (100%)
b0406.6	Replace Mitchell 138 kV breaker “Charlerio #1”	APS (100%)
b0406.7	Replace Mitchell 138 kV breaker “Shepler Hill Jct”	APS (100%)
b0406.8	Replace Mitchell 138 kV breaker “Union Jct”	APS (100%)
b0406.9	Replace Mitchell 138 kV breaker “#1-2 138 kV bus tie”	APS (100%)
b0407.1	Replace Marlowe 138 kV breaker “#1 transf”	APS (100%)
b0407.2	Replace Marlowe 138 kV breaker “MBO”	APS (100%)
b0407.3	Replace Marlowe 138 kV breaker “BMA”	APS (100%)
b0407.4	Replace Marlowe 138 kV breaker “BMR”	APS (100%)
b0407.5	Replace Marlowe 138 kV breaker “WC-1”	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0407.6	Replace Marlowe 138 kV breaker “R11”	APS (100%)
b0407.7	Replace Marlowe 138 kV breaker “W”	APS (100%)
b0407.8	Replace Marlowe 138 kV breaker “138 kV bus tie”	APS (100%)
b0408.1	Replace Trissler 138 kV breaker “Belmont 604”	APS (100%)
b0408.2	Replace Trissler 138 kV breaker “Edgelawn 90”	APS (100%)
b0409.1	Replace Weirton 138 kV breaker “Wylie Ridge 210”	APS (100%)
b0409.2	Replace Weirton 138 kV breaker “Wylie Ridge 216”	APS (100%)
b0410	Replace Glen Falls 138 kV breaker “McAlpin 30”	APS (100%)
b0417	Reconductor Mitchell – Shepler Hill Junction 138kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0418	Install a breaker failure auto-restoration scheme at Cabot 500 kV for the failure of the #6 breaker	AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b0419	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (100%)
b0420	Operating Procedure to open the Black Oak 500/138 kV transformer #3 for the loss of Hatfield – Ronco 500 kV and the Hatfield #3 Generation	APS (100%)
b0445	Upgrade substation equipment and reconductor the Tidd – Mahans Lane – Weirton 138kV circuit with 954 ACSR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0460	Raise limiting structures on Albright – Bethelboro 138 kV to raise the rating to 175 MVA normal 214 MVA emergency	APS (100%)
b0491	Construct an Amos to Welton Spring to WV state line 765 kV circuit (APS equipment)	<p>As specified under the procedures detailed in Attachment H-19B</p> <p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492	Construct a Welton Spring to Kemptown 765 kV line (APS equipment)	As specified under the procedures detailed in Attachment H-19B
		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0492.3	Replace Eastalco 230 kV breaker D-26	APS (100%)
b0492.4	Replace Eastalco 230 kV breaker D-28	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.5	Replace Eastalco 230 kV breaker D-31	APS (100%)
b0495	Replace existing Kammer 765/500 kV transformer with a new larger transformer	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  BGE (45.97%) / DEOK (0.01%) / PEPCO (54.02%)</p>
b0533	Reconductor the Powell Mountain – Sutton 138 kV line	APS (100%)
b0534	Install a 28.61 MVAR capacitor on Sutton 138 kV	APS (100%)
b0535	Install a 44 MVAR capacitor on Dutch Fork 138 kV	APS (100%)
b0536	Replace Doubs circuit breaker DJ1	APS (100%)
b0537	Replace Doubs circuit breaker DJ7	APS (100%)
b0538	Replace Doubs circuit breaker DJ10	APS (100%)
b0572.1	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0572.2	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR		APS (100%)
b0573	Reconfigure circuits in Butler – Cabot 138 kV area		APS (100%)
b0577	Replace Fort Martin 500 kV breaker FL-1		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0584	Install 33 MVAR 138 kV capacitor at Necessity 138 kV	APS (100%)
b0585	Increase Cecil 138 kV capacitor size to 44 MVAR, replace five 138 kV breakers at Cecil due to increased short circuit fault duty as a result of the addition of the Prexy substation	APS (100%)
b0586	Increase Whiteley 138 kV capacitor size to 44 MVAR	APS (100%)
b0587	Reconductor AP portion of Tidd – Carnegie 138 kV and Carnegie – Weirton 138 kV with 954 ACSR	APS (100%)
b0588	Install a 40.8 MVAR 138 kV capacitor at Grassy Falls	APS (100%)
b0589	Replace five 138 kV breakers at Cecil	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0590	Replace #1 and #2 breakers at Charleroi 138 kV	APS (100%)
b0591	Install a 25.2 MVAR capacitor at Seneca Caverns 138 kV	APS (100%)
b0673	Rebuild Elko – Carbon Center Junction using 230 kV construction	APS (100%)
b0674	Construct new Osage – Whiteley 138 kV circuit	APS (97.68%) / DL (0.96%) / PENELEC (1.09%) / ECP** (0.01%) / PSEG (0.25%) / RE (0.01%)
b0674.1	Replace the Osage 138 kV breaker ‘CollinsF126’	APS (100%)
b0675.1	Convert Monocacy - Walkersville 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.2	Convert Walkersville - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.3	Convert Ringgold - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.4	Convert Catoctin - Carroll 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.5	Convert portion of Ringgold Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.6	Convert Catoctin Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.7	Convert portion of Carroll Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.8	Convert Monocacy Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.9	Convert Walkersville Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0676.1	Reconductor Doubs - Lime Kiln (#207) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0676.2	Reconductor Doubs - Lime Kiln (#231) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0677	Reconductor Double Toll Gate – Riverton with 954 ACSR	APS (100%)
b0678	Reconductor Glen Falls - Oak Mound 138kV with 954 ACSR	APS (100%)
b0679	Reconductor Grand Point – Letterkenny with 954 ACSR	APS (100%)
b0680	Reconductor Greene – Letterkenny with 954 ACSR	APS (100%)
b0681	Replace 600/5 CT's at Franklin 138 kV	APS (100%)
b0682	Replace 600/5 CT's at Whiteley 138 kV	APS (100%)
b0684	Reconductor Guilford – South Chambersburg with 954 ACSR	APS (100%)
b0685	Replace Ringgold 230/138 kV #3 with larger transformer	APS (71.93%) / JCPL (4.17%) / ME (6.79%) / NEPTUNE* (0.38%) / PECO (4.05%) / PENELEC (5.88%) / ECP** (0.18%) / PSEG (6.37%) / RE (0.25%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b0704	Install a third Cabot 500/138 kV transformer		APS (74.36%) / DL (2.73%) PENELEC (22.91%)
b0797	Advance n0321 (Replace Doubs Circuit Breaker DJ2)		APS(100%)
b0798	Advance n0322 (Replace Doubs Circuit Breaker DJ3)		APS(100%)
b0799	Advance n0323 (Replace Doubs Circuit Breaker DJ6)		APS(100%)
b0800	Advance n0327 (Replace Doubs Circuit Breaker DJ16)		APS(100%)
b0941	Replace Opequon 138 kV breaker 'BUSTIE'		APS(100%)
b0942	Replace Butler 138 kV breaker '#1 BANK'		APS(100%)
b0943	Replace Butler 138 kV breaker '#2 BANK'		APS(100%)
b0944	Replace Yukon 138 kV breaker 'Y-8'		APS(100%)
b0945	Replace Yukon 138 kV breaker 'Y-3'		APS(100%)
b0946	Replace Yukon 138 kV breaker 'Y-1'		APS(100%)
b0947	Replace Yukon 138 kV breaker 'Y-5'		APS(100%)
b0948	Replace Yukon 138 kV breaker 'Y-2'		APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0949	Replace Yukon 138 kV breaker 'Y-19'		APS(100%)
b0950	Replace Yukon 138 kV breaker 'Y-4'		APS(100%)
b0951	Replace Yukon 138 kV breaker 'Y-9'		APS(100%)
b0952	Replace Yukon 138 kV breaker 'Y-11'		APS(100%)
b0953	Replace Yukon 138 kV breaker 'Y-13'		APS(100%)
b0954	Replace Charleroi 138 kV breaker '#1 XFMR BANK'		APS(100%)
b0955	Replace Yukon 138 kV breaker 'Y-7'		APS(100%)
b0956	Replace Pruntytown 138 kV breaker 'P-9'		APS(100%)
b0957	Replace Pruntytown 138 kV breaker 'P-12'		APS(100%)
b0958	Replace Pruntytown 138 kV breaker 'P-15'		APS(100%)
b0959	Replace Charleroi 138 kV breaker '#2 XFMR BANK'		APS(100%)
b0960	Replace Pruntytown 138 kV breaker 'P-2'		APS(100%)
b0961	Replace Pruntytown 138 kV breaker 'P-5'		APS(100%)
b0962	Replace Yukon 138 kV breaker 'Y-18'		APS(100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0963	Replace Yukon 138 kV breaker 'Y-10'	APS(100%)
b0964	Replace Pruntytown 138 kV breaker 'P-11'	APS(100%)
b0965	Replace Springdale 138 kV breaker '138E'	APS(100%)
b0966	Replace Pruntytown 138 kV breaker 'P-8'	APS(100%)
b0967	Replace Pruntytown 138 kV breaker 'P-14'	APS(100%)
b0968	Replace Ringgold 138 kV breaker '#3 XFMR BANK'	APS(100%)
b0969	Replace Springdale 138 kV breaker '138C'	APS(100%)
b0970	Replace Rivesville 138 kV breaker '#8 XFMR BANK'	APS(100%)
b0971	Replace Springdale 138 kV breaker '138F'	APS(100%)
b0972	Replace Belmont 138 kV breaker 'B-16'	APS(100%)
b0973	Replace Springdale 138 kV breaker '138G'	APS(100%)
b0974	Replace Springdale 138 kV breaker '138V'	APS(100%)
b0975	Replace Armstrong 138 kV breaker 'BROOKVILLE'	APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0976	Replace Springdale 138 kV breaker '138P'	APS(100%)
b0977	Replace Belmont 138 kV breaker 'B-17'	APS(100%)
b0978	Replace Springdale 138 kV breaker '138U'	APS(100%)
b0979	Replace Springdale 138 kV breaker '138D'	APS(100%)
b0980	Replace Springdale 138 kV breaker '138R'	APS(100%)
b0981	Replace Yukon 138 kV breaker 'Y-12'	APS(100%)
b0982	Replace Yukon 138 kV breaker 'Y-17'	APS(100%)
b0983	Replace Yukon 138 kV breaker 'Y-14'	APS(100%)
b0984	Replace Rivesville 138 kV breaker '#10 XFMR BANK'	APS(100%)
b0985	Replace Belmont 138 kV breaker 'B-14'	APS(100%)
b0986	Replace Armstrong 138 kV breaker 'RESERVE BUS'	APS(100%)
b0987	Replace Yukon 138 kV breaker 'Y-16'	APS(100%)
b0988	Replace Springdale 138 kV breaker '138T'	APS(100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0989	Replace Edgelawn 138 kV breaker 'GOFF RUN #632'		APS(100%)
b0990	Change reclosing on Cabot 138 kV breaker 'C-9'		APS(100%)
b0991	Change reclosing on Belmont 138 kV breaker 'B-7'		APS(100%)
b0992	Change reclosing on Belmont 138 kV breaker 'B-12'		APS(100%)
b0993	Change reclosing on Belmont 138 kV breaker 'B-9'		APS(100%)
b0994	Change reclosing on Belmont 138 kV breaker 'B-19'		APS(100%)
b0995	Change reclosing on Belmont 138 kV breaker 'B-21'		APS(100%)
b0996	Change reclosing on Willow Island 138 kV breaker 'FAIRVIEW #84'		APS(100%)
b0997	Change reclosing on Cabot 138 kV breaker 'C-4'		APS(100%)
b0998	Change reclosing on Cabot 138 kV breaker 'C-1'		APS(100%)
b0999	Replace Redbud 138 kV breaker 'BUS TIE'		APS(100%)
b1022.1	Reconfigure the Peters to Bethel Park 138 kV line and Elrama to Woodville 138 kV line to create a 138 kV path from Woodville to Peters and a 138 kV path from Elrama to Bethel Park		APS (96.98%) / DL (3.02%)
b1022.3	Add static capacitors at Smith 138 kV		APS (96.98%) / DL (3.02%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1022.4	Add static capacitors at North Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.5	Add static capacitors at South Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.6	Add static capacitors at Manifold 138 kV		APS (96.98%) / DL (3.02%)
b1022.7	Add static capacitors at Houston 138 kV		APS (96.98%) / DL (3.02%)
b1023.1	Install a 500/138 kV transformer at 502 Junction		APS (100%)
b1023.2	Construct a new Franklin - 502 Junction 138 kV line including a rebuild of the Whiteley - Franklin 138 kV line to double circuit		APS (100%)
b1023.3	Construct a new 502 Junction - Osage 138 kV line		APS (100%)
b1023.4	Construct Braddock 138 kV breaker station that connects the Charleroi - Gordon 138 kV line, Washington - Franklin 138 kV line and the Washington - Vanceville 138 kV line including a 66 MVAR capacitor		APS (100%)
b1027	Increase the size of the shunt capacitors at Enon 138 kV		APS (100%)
b1028	Raise three structures on the Osage - Collins Ferry 138 kV line to increase the line rating		APS (100%)
b1128	Reconductor the Edgewater - Vasco Tap; Edgewater - Loyalhanna 138 kV lines with 954 ACSR		APS (100%)
b1129	Reconductor the East Waynesboro - Ringgold 138 kV line with 954 ACSR		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1131 Upgrade Double Tollgate – Meadowbrook MDT Terminal Equipment		APS (100%)
b1132 Upgrade Double Tollgate-Meadowbrook MBG terminal equipment		APS (100%)
b1133 Upgrade terminal equipment at Springdale		APS (100%)
b1135 Reconductor the Bartonville – Meadowbrook 138 kV line with high temperature conductor		APS (100%)
b1137 Reconductor the Eastgate – Luxor 138 kV; Eastgate – Sony 138 kV line with 954 ACSR		APS (78.59%) / PENELEC (14.08%) / ECP ** (0.23%) / PSEG (6.83%) / RE (0.27%)
b1138 Reconductor the King Farm – Sony 138 kV line with 954 ACSR		APS (100%)
b1139 Reconductor the Yukon – Waltz Mills 138 kV line with high temperature conductor		APS (100%)
b1140 Reconductor the Bracken Junction – Luxor 138 kV line with 954 ACSR		APS (100%)
b1141 Reconductor the Sewickley – Waltz Mills Tap 138 kV line with high temperature conductor		APS (100%)
b1142 Reconductor the Bartonville – Stephenson 138 kV; Stonewall – Stephenson 138 kV line with 954 ACSR		APS (100%)
b1143 Reconductor the Youngwood – Yukon 138 kV line with high temperature conductor		APS (89.92%) / PENELEC (10.08%)
b1144 Reconductor the Bull Creek Junction – Cabot 138 kV line with high temperature conductor		APS (100%)

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1145	Reconductor the Lawson Junction – Cabot 138 kV line with high temperature conductor	APS (100%)
b1146	Replace Layton - Smithton #61 138 kV line structures to increase line rating	APS (100%)
b1147	Replace Smith – Yukon 138 kV line structures to increase line rating	APS (100%)
b1148	Reconductor the Loyalhanna – Luxor 138 kV line with 954 ACSR	APS (100%)
b1149	Reconductor the Luxor – Stony Springs Junction 138 kV line with 954 ACSR	APS (100%)
b1150	Upgrade terminal equipment at Social Hall	APS (100%)
b1151	Reconductor the Greenwood – Redbud 138 kV line with 954 ACSR	APS (100%)
b1152	Reconductor Grand Point – South Chambersburg	APS (100%)
b1159	Replace Peters 138 kV breaker ‘Bethel P OCB’	APS (100%)
b1160	Replace Peters 138 kV breaker ‘Cecil OCB’	APS (100%)
b1161	Replace Peters 138 kV breaker ‘Union JctOCB’	APS (100%)
b1162	Replace Double Toll Gate 138 kV breaker ‘DRB-2’	APS (100%)
b1163	Replace Double Toll Gate 138 kV breaker ‘DT 138 kV OCB’	APS (100%)
b1164	Replace Cecil 138 kV breaker ‘Enlow OCB’	APS (100%)
b1165	Replace Cecil 138 kV breaker ‘South Fayette’	APS (100%)
b1166	Replace Wylie Ridge 138 kV breaker ‘W-9’	APS (100%)
b1167	Replace Reid 138 kV breaker ‘RI-2’	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1171.1	Install the second Black Oak 500/138 kV transformer, two 138 kV breaker, and related substation work		BGE (20.76%) / DPL (3.14%) / Dominion (39.55%) / ME (2.71%) / PECO (3.36%) / PEPCO (30.48%)
b1171.3	Install six 500 kV breakers and remove BOL1 500 kV breaker at Black Oak		AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
b1200	Reconductor Double Toll Gate – Greenwood 138 kV with 954 ACSR conductor		APS (100%)
b1221.1	Convert Carbon Center from 138 kV to a 230 kV ring bus		APS (100%)
b1221.2	Construct Bear Run 230 kV substation with 230/138 kV transformer		APS (100%)
b1221.3	Loop Carbon Center Junction – Williamette line into Bear Run		APS (100%)
b1221.4	Carbon Center – Carbon Center Junction & Carbon Center Junction – Bear Run conversion from 138 kV to 230 kV		APS (100%)
b1230	Reconductor Willow-Eureka & Eureka-St Mary 138 kV lines		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1232	Reconductor Nipetown – Reid 138 kV with 1033 ACCR		AEC (1.40%) / APS (75.74%) / DPL (1.92%) / JCPL (2.92%) / ME (6.10%) / Neptune (0.27%) / PECO (4.40%) / PENELEC (3.26%) / PPL (3.99%)
b1233.1	Upgrade terminal equipment at Washington		APS (100%)
b1234	Replace structures between Ridgeway and Paper city		APS (100%)
b1235	Reconductor the Albright – Black Oak AFA 138 kV line with 795 ACSS/TW		APS (30.25%) / BGE (16.10%) / Dominion (30.51%) / PEPCO (23.14%)
b1237	Upgrade terminal equipment at Albright, replace bus and line side breaker disconnects and leads, replace breaker risers, upgrade RTU and line		APS (100%)
b1238	Install a 138 kV 44 MVAR capacitor at Edgelawn substation		APS (100%)
b1239	Install a 138 kV 44 MVAR capacitor at Ridgeway substation		APS (100%)
b1240	Install a 138 kV 44 MVAR capacitor at Elko Substation		APS (100%)
b1241	Upgrade terminal equipment at Washington substation on the GE Plastics/DuPont terminal		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1242 Replace structures between Collins Ferry and West Run		APS (100%)
b1243 Install a 138 kV capacitor at Potter Substation		APS (100%)
b1261 Replace Butler 138 kV breaker '1-2 BUS 138'		APS (100%)
b1383 Install 2nd 500/138 kV transformer at 502 Junction		APS (93.27%) / DL (5.39%) / PENELEC (1.34%)
b1384 Reconductor approximately 2.17 miles of Bedington – Shepherdstown 138 kV with 954 ACSR		APS (100%)
b1385 Reconductor Halfway – Paramount 138 kV with 1033 ACCR		APS (100%)
b1386 Reconductor Double Tollgate – Meadow Brook 138 kV ckt 2 with 1033 ACCR		APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1387 Reconductor Double Tollgate – Meadow Brook 138 kV		APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1388 Reconductor Feagans Mill – Millville 138 kV with 954 ACSR		APS (100%)
b1389 Reconductor Bens Run – St. Mary's 138 kV with 954 ACSR		AEP (12.40%) / APS (17.80%) / DL (69.80%)
b1390 Replace Bus Tie Breaker at Opequon		APS (100%)
b1391 Replace Line Trap at Gore		APS (100%)
b1392 Replace structure on Belmont – Trissler 138 kV line		APS (100%)
b1393 Replace structures Kingwood – Pruntytown 138 kV line		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b1395	Upgrade Terminal Equipment at Kittanning		APS (100%)
b1401	Change reclosing on Pruntytown 138 kV breaker 'P-16' to 1 shot at 15 seconds		APS (100%)
b1402	Change reclosing on Rivesville 138 kV breaker 'Pruntytown #34' to 1 shot at 15 seconds		APS (100%)
b1403	Change reclosing on Yukon 138 kV breaker 'Y21 Shepler' to 1 shot at 15 seconds		APS (100%)
b1404	Replace the Kiski Valley 138 kV breaker 'Vandergrift' with a 40 kA breaker		APS (100%)
b1405	Change reclosing on Armstrong 138 kV breaker 'GARETTRJCT' at 1 shot at 15 seconds		APS (100%)
b1406	Change reclosing on Armstrong 138 kV breaker 'KITANNING' to 1 shot at 15 seconds		APS (100%)
b1407	Change reclosing on Armstrong 138 kV breaker 'BURMA' to 1 shot at 15 seconds		APS (100%)
b1408	Replace the Weirton 138 kV breaker 'Tidd 224' with a 40 kA breaker		APS (100%)
b1409	Replace the Cabot 138 kV breaker 'C9 Kiski Valley' with a 40 kA breaker		APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b1507.2	Terminal Equipment upgrade at Doubs substation		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) /  DPL (2.53%) / Dominion (13.30%)  / EKPC (2.14%) / HTP*** (0.20%)  / JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (19.55%) / BGE (15.30%) /  Dominion (48.38%) / PEPCO  (16.77%)</p>
b1507.3	Mt. Storm – Doubs transmission line rebuild in Maryland – Total line mileage for APS is 2.71 miles		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) /  DPL (2.53%) / Dominion (13.30%)  / EKPC (2.14%) / HTP*** (0.20%)  / JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (19.55%) / BGE (15.30%) /  Dominion (48.38%) / PEPCO  (16.77%)</p>
b1510	Install 59.4 MVAR capacitor at Waverly		APS (100%)
b1672	Install a 230 kV breaker at Carbon Center		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0539	Replace Doubs circuit breaker DJ11		APS (100%)
b0540	Replace Doubs circuit breaker DJ12		APS (100%)
b0541	Replace Doubs circuit breaker DJ13		APS (100%)
b0542	Replace Doubs circuit breaker DJ20		APS (100%)
b0543	Replace Doubs circuit breaker DJ21		APS (100%)
b0544	Remove instantaneous reclose from Eastalco circuit breaker D-26		APS (100%)
b0545	Remove instantaneous reclose from Eastalco circuit breaker D-28		APS (100%)
b0559	Install 200 MVAR capacitor at Meadow Brook 500 kV substation	b0328.2	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0560	Install 250 MVAR capacitor at Kemptown 500 kV substation		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>
b1803	Build a 300 MVAR Switched Shunt at Doubs 500 kV and increase (~50 MVAR) in size the existing Switched Shunt at Doubs 500 kV		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (19.55%) / BGE (15.30%) / Dominion (48.38%) / PEPCO (16.77%)</p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1804	Install a new 600 MVAR SVC at Meadowbrook 500kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)</p>
b1816.1	Replace relaying at the Mt. Airy substation on the Carroll - Mt. Airy 230 kV line	APS (100%)
b1816.2	Adjust the control settings of all existing capacitors at Mt Airy 34.5kV, Monocacy 138kV, Ringgold 138kV served by Potomac Edison's Eastern 230 kV network to ensure that all units will be on during the identified N-1-1 contingencies	APS (100%)
b1816.3	Replace existing unidirectional LTC controller on the No. 4, 230/138 kV transformer at Carroll substation with a bidirectional unit	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1816.4	Isolate and bypass the 138 kV reactor at Germantown Substation		APS (100%)
b1816.6	Replace 336.4 ACSR conductor on the Catoctin - Carroll 138 kV line using 556.5 ACSR (26/7) or equivalent on existing structures (12.7 miles), 800 A wave traps at Carroll and Catoctin with 1200 A units, and 556.5 ACSR SCCIR (Sub-conductor) line risers and bus traps with 795 ACSR or equivalent		APS (100%)
b1822	Replace the 1200 A wave trap, line risers, breaker risers with 1600 A capacity terminal equipment at Reid 138 kV SS		APS (100%)
b1823	Replace the 800 A wave trap with a 1200 A wave trap at Millville 138 kV substation		APS (100%)
b1824	Reconductor Grant Point - Guilford 138kV line approximately 8 miles of 556 ACSR with 795 ACSR		APS (100%)
b1825	Replace the 800 Amp line trap at Butler 138 kV Sub on the Cabot East 138 kV line		APS (100%)
b1826	Change the CT ratio at Double Toll Gate 138 kV SS on MDT line		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1827	Change the CT ratio at Double Toll Gate 138 kV SS on MBG line	APS (100%)
b1828.1	Reconductor the Bartonville – Stephenson 3.03 mile 138 kV line of 556 ACSR with 795 ACSR	APS (100%)
b1828.2	Reconductor the Stonewall – Stephenson 2.08 mile 138 kV line of 556 ACSR with 795 ACSR	APS (100%)
b1829	Replace the existing 138 kV 556.5 ACSR substation conductor risers with 954 ACSR at the Redbud 138 kV substation, including but not limited to the line side disconnect leads	APS (100%)
b1830	Replace 1200 A wave trap and 1024 ACAR breaker risers at Halfway 138 kV substation, and replace 1024 ACAR breaker risers at Paramount 138 kV substation	APS (100%)
b1832	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 1 (207) 230 kV line terminal	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1833	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 2 (231) 230 kV line terminal	APS (100%)
b1835	Reconductor 14.3 miles of 556 ACSR with 795 ACSR from Old Chapel to Millville 138 kV and upgrade line risers at Old Chapel 138 kV and Millville 138 kV and replace 1200 A wave trap at Millville 138 kV	APS (37.68%) / Dominion (34.46%) / PEPCO (13.69%) / BGE (11.45%) / ME (2.01%) / PENELEC (0.53%) / DL (0.18%)
b1836	Replace 1200 A wave trap with 1600 A wave trap at Reid 138 kV SS	APS (100%)
b1837	Replace 750 CU breaker risers with 795 ACSR at Marlowe 138 kV and replace 1200 A wave traps with 1600 A wave traps at Marlowe 138 kV and Bedington 138 kV	APS (100%)
b1838	Replace the 1200 A Bedington 138 kV line air switch and the 1200 A 138 kV bus tie air switch at Nipetown 138 kV with 1600 A switches	APS (100%)
b1839	Install additional 33 MVAR capacitors at Grand Point 138 kV SS and Guildford 138 kV SS	APS (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1840	Construct a 138 kV line between Buckhannon and Weston 138 kV substations	APS (100%)
b1902	Replace line trap at Stonewall on the Stephenson 138 kV line terminal	APS (100%)
b1941	Loop the Homer City-Handsome Lake 345 kV line into the Armstrong substation and install a 345/138 kV transformer at Armstrong	APS (67.86%) / PENELEC (32.14%)
b1942	Change the CT ratio at Millville to improve the Millville – Old Chapel 138 kV line ratings	APS (100%)
b1964	Convert Moshannon substation to a 4 breaker 230 kV ring bus	APS (41.06%) / DPL (6.68%) / JCPL (5.48%) / ME (10.70%) / Neptune* (0.53%) / PECO (15.53%) / PPL (20.02%)
b1965	Install a 44 MVAR 138 kV capacitor at Luxor substation	APS (100%)
b1986	Upgrade the AP portion of the Elrama – Mitchell 138 kV line by replace breaker risers on the Mitchell 138 kV bus on the Elrama terminal	APS (100%)
b1987	Reconductor the Osage-Collins Ferry 138 kV line with 795 ACSS. Upgrade terminal equipment at Osage and Collins Ferry	APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1988	Raise structures between Lake Lynn and West Run to eliminate the clearance de-rates on the West Run – Lake Lynn 138 kV line		APS (100%)
b1989	Raise structures between Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line		APS (100%)
b2095	Replace Weirt 138 kV breaker 'S-TORONTO226' with 63kA rated breaker		APS (100%)
b2096	Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'		APS (100%)
b2097	Replace Ridgeley 138 kV breaker '#2 XFMR OCB'		APS (100%)
b2098	Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker		APS (100%)
b2099	Revise the reclosing of Ridgeley 138 kV breaker 'RC1'		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2100	Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker		APS (100%)
b2101	Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker		APS (100%)
b2102	Replace Armstrong 138 kV breaker 'GARETTRJCT' with 40kA rated breaker		APS (100%)
b2103	Replace Armstrong 138 kV breaker 'BURMA' with 40kA rated breaker		APS (100%)
b2104	Replace Armstrong 138 kV breaker 'KITANNING' with 40kA rated breaker		APS (100%)
b2105	Replace Armstrong 138 kV breaker 'KISSINGERJCT' with 40kA rated breaker		APS (100%)
b2106	Replace Wylie Ridge 345 kV breaker 'WK-1' with 63kA rated breaker		APS (100%)
b2107	Replace Wylie Ridge 345 kV breaker 'WK-2' with 63kA rated breaker		APS (100%)
b2108	Replace Wylie Ridge 345 kV breaker 'WK-3' with 63kA rated breaker		APS (100%)
b2109	Replace Wylie Ridge 345 kV breaker 'WK-4' with 63kA rated breaker		APS (100%)
b2110	Replace Wylie Ridge 345 kV breaker 'WK-6' with 63kA rated breaker		APS (100%)
b2111	Replace Wylie Ridge 138 kV breaker 'WK-7' with 63kA rated breaker		APS (100%)
b2112	Replace Wylie Ridge 345 kV breaker 'WK-5'		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2113	Replace Weirton 138 kV breaker 'NO 6 XFMR' with 63kA rated breaker		APS (100%)
b2114	Replace Armstrong 138 kV breaker 'Bus-Tie' (Status On-Hold pending retirement)		APS (100%)
b2124.1	Add a new 138 kV line exit		APS (100%)
b2124.2	Construct a 138 kV ring bus and install a 138/69 kV autotransformer		APS (100%)
b2124.3	Add new 138 kV line exit and install a 138/25 kV transformer		APS (100%)
b2124.4	Construct approximately 5.5 miles of 138 kV line		APS (100%)
b2124.5	Convert approximately 7.5 miles of 69 kV to 138 kV		APS (100%)
b2156	Install a 75 MVAR 230 kV capacitor at Shingletown Substation		APS (100%)
b2165	Replace 800A wave trap at Stonewall with a 1200 A wave trap		APS (100%)
b2166	Reconductor the Millville – Sleepy Hollow 138kV 4.25 miles of 556 ACSR with 795 ACSR, upgrade line risers at Sleepy Hollow, and change 1200 A CT tap at Millville to 800		APS (100%)
b2168	For Grassy Falls 138kV Capacitor bank adjust turn-on voltage to 1.0pu with a high limit of 1.04pu, For Crupperneck and Powell Mountain 138kV Capacitor Banks adjust turn-on voltage to 1.01pu with a high limit of 1.035pu		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2169	Replace/Raise structures on the Yukon-Smithton 138 kV line section to eliminate clearance de-rate	APS (100%)
b2170	Replace/Raise structures on the Smithton-Shepler Hill Jct 138 kV line section to eliminate clearance de-rate	APS (100%)
b2171	Replace/Raise structures on the Parsons-William 138 kV line section to eliminate clearance de-rate	APS (100%)
b2172	Replace/Raise structures on the Parsons - Loughs Lane 138 kV line section to eliminate clearance de-rate	APS (100%)

## SCHEDULE 12 – APPENDIX

- (17) **AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0318	Install a 765/138 kV transformer at Amos		AEP (99.00%) / PEPCO (1.00%)
b0324	Replace entrance conductors, wave traps, and risers at the Tidd 345 kV station on the Tidd – Canton Central 345 kV circuit		AEP (100%)
b0447	Replace Cook 345 kV breaker M2		AEP (100%)
b0448	Replace Cook 345 kV breaker N2		AEP (100%)
b0490	Construct an Amos – Bedington 765 kV circuit (AEP equipment)	As specified under the procedures detailed in Attachment H-19B	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.2	Replace Amos 138 kV breaker 'B'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>
b0490.3	Replace Amos 138 kV breaker 'B1'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.4	Replace Amos 138 kV breaker 'C'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0490.5	Replace Amos 138 kV breaker 'C1'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.6	Replace Amos 138 kV breaker 'D'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0490.7	Replace Amos 138 kV breaker 'D2'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.8	Replace Amos 138 kV breaker 'E'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0490.9	Replace Amos 138 kV breaker 'E2'	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0504	Add two advanced technology circuit breakers at Hanging Rock 765 kV to improve operational performance	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> AEP (100%)
b0570	Reconductor East Side Lima – Sterling 138 kV	AEP (41.99%) / ComEd (58.01%)
b0571	Reconductor West Millersport – Millersport 138 kV	AEP (73.83%) / ComEd (19.26%) / Dayton (6.91%)
b0748	Establish a new 69 kV circuit between the Canal Road and East Wooster stations, establish a new 69 kV circuit between the West Millersburg and Moreland Switch stations (via Shreve), add reactive support via cap banks	AEP (100%)
b0838	Hazard Area 138 kV and 69 kV Improvement Projects	AEP (100%)
b0839	Replace existing 450 MVA transformer at Twin Branch 345 / 138 kV with a 675 MVA transformer	AEP (99.73%) / Dayton (0.27%)
b0840	String a second 138 kV circuit on the open tower position between Twin Branch and East Elkhart	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0840.1	Establish a new 138/69-34.5kV Station to interconnect the existing 34.5kV network		AEP (100%)
b0917	Replace Baileysville 138 kV breaker 'P'		AEP (100%)
b0918	Replace Riverview 138 kV breaker '634'		AEP (100%)
b0919	Replace Torrey 138 kV breaker 'W'		AEP (100%)
b1032.1	Construct a new 345/138kV station on the Marquis-Bixby 345kV line near the intersection with Ross - Highland 69kV		AEP (89.97%) / Dayton (10.03%)
b1032.2	Construct two 138kV outlets to Delano 138kV station and to Camp Sherman station		AEP (89.97%) / Dayton (10.03%)
b1032.3	Convert Ross - Circleville 69kV to 138kV		AEP (89.97%) / Dayton (10.03%)
b1032.4	Install 138/69kV transformer at new station and connect in the Ross - Highland 69kV line		AEP (89.97%) / Dayton (10.03%)
b1033	Add a third delivery point from AEP's East Danville Station to the City of Danville.		AEP (100%)
b1034.1	Establish new South Canton - West Canton 138kV line (replacing Torrey - West Canton) and Wagenhals - Wayview 138kV		AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.2	Loop the existing South Canton - Wayview 138kV circuit in-and-out of West Canton	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.3	Install a 345/138kV 450 MVA transformer at Canton Central	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.4	Rebuild/reconductor the Sunnyside - Torrey 138kV line	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.5	Disconnect/eliminate the West Canton 138kV terminal at Torrey Station	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.6	Replace all 138kV circuit breakers at South Canton Station and operate the station in a breaker and a half configuration	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.7	Replace all obsolete 138kV circuit breakers at the Torrey and Wagenhals stations	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.8	Install additional 138kV circuit breakers at the West Canton, South Canton, Canton Central, and Wagenhals stations to accommodate the new circuits	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1035	Establish a third 345kV breaker string in the West Millersport Station. Construct a new West Millersport – Gahanna 138kV circuit. Miscellaneous improvements to 138kV transmission system.	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1036	Upgrade terminal equipment at Poston Station and update remote end relays	AEP (100%)
b1037	Sag check Bonsack–Cloverdale 138 kV, Cloverdale–Centerville 138kV, Centerville–Ivy Hill 138kV, Ivy Hill–Reusens 138kV, Bonsack–Reusens 138kV and Reusens–Monel–Gomingo–Joshua Falls 138 kV.	AEP (100%)
b1038	Check the Crooksville - Muskingum 138 kV sag and perform the required work to improve the emergency rating	AEP (100%)
b1039	Perform a sag study for the Madison – Cross Street 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1040	Rebuild an 0.065 mile section of the New Carlisle – Olive 138 kV line and change the 138 kV line switches at New Carlisle	AEP (100%)
b1041	Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating	AEP (100%)
b1042	Perform sag studies to raise the emergency rating of Amos – Poca 138kV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1043	Perform sag studies to raise the emergency rating of Turner - Ruth 138kV	AEP (100%)
b1044	Perform sag studies to raise the emergency rating of Kenova – South Point 138kV	AEP (100%)
b1045	Perform sag studies of Tri State - Darrah 138 kV	AEP (100%)
b1046	Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating	AEP (100%)
b1047	Perform sag study of Otter Switch - Altavista 138kV to raise the emergency rating	AEP (100%)
b1048	Reconductor the Bixby - Three C - Groves and Bixby - Groves 138 kV tower line	AEP (100%)
b1049	Upgrade the risers at the Riverside station to increase the rating of Benton Harbor – Riverside 138kV	AEP (100%)
b1050	Rebuilding and reconductor the Bixby – Pickerington Road - West Lancaster 138 kV line	AEP (100%)
b1051	Perform a sag study for the Kenzie Creek – Pokagon 138 kV line and perform the required work to improve the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1052	Unsix-wire the existing Hyatt - Sawmill 138 kV line to form two Hyatt - Sawmill 138 kV circuits	AEP (100%)
b1053	Perform a sag study and remediation of 32 miles between Claytor and Matt Funk.	AEP (100%)
b1091	Add 28.8 MVAR 138 kV capacitor bank at Huffman and 43.2 MVAR 138 kV Bank at Jubal Early and 52.8 MVAR 138 kV Bank at Progress Park Stations	AEP (100%)
b1092	Add 28.8 MVAR 138 kV capacitor bank at Sullivan Gardens and 52.8 MVAR 138 kV Bank at Reedy Creek Stations	AEP (100%)
b1093	Add a 43.2 MVAR capacitor bank at the Morgan Fork 138 kV Station	AEP (100%)
b1094	Add a 64.8 MVAR capacitor bank at the West Huntington 138 kV Station	AEP (100%)
b1108	Replace Ohio Central 138 kV breaker 'C2'	AEP (100%)
b1109	Replace Ohio Central 138 kV breaker 'D1'	AEP (100%)
b1110	Replace Sporn A 138 kV breaker 'J'	AEP (100%)
b1111	Replace Sporn A 138 kV breaker 'J2'	AEP (100%)
b1112	Replace Sporn A 138 kV breaker 'L'	AEP (100%)
b1113	Replace Sporn A 138 kV breaker 'L1'	AEP (100%)
b1114	Replace Sporn A 138 kV breaker 'L2'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1115	Replace Sporn A 138 kV breaker 'N'	AEP (100%)
b1116	Replace Sporn A 138 kV breaker 'N2'	AEP (100%)
b1227	Perform a sag study on Altavista – Leesville 138 kV circuit	AEP (100%)
b1231	Replace the existing 138/69-12 kV transformer at West Moulton Station with a 138/69 kV transformer and a 69/12 kV transformer	AEP (96.69%) / Dayton (3.31%)
b1375	Replace Roanoke 138 kV breaker 'T'	AEP (100%)
b1376	Replace Roanoke 138 kV breaker 'E'	AEP (100%)
b1377	Replace Roanoke 138 kV breaker 'F'	AEP (100%)
b1378	Replace Roanoke 138 kV breaker 'G'	AEP (100%)
b1379	Replace Roanoke 138 kV breaker 'B'	AEP (100%)
b1380	Replace Roanoke 138 kV breaker 'A'	AEP (100%)
b1381	Replace Olive 345 kV breaker 'E'	AEP (100%)
b1382	Replace Olive 345 kV breaker 'R2'	AEP (100%)
b1416	Perform a sag study on the Desoto – Deer Creek 138 kV line to increase the emergency rating	AEP (100%)
b1417	Perform a sag study on the Delaware – Madison 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1418	Perform a sag study on the Rockhill – East Lima 138 kV line to increase the emergency rating	AEP (100%)
b1419	Perform a sag study on the Findlay Center – Fostoria Ctl 138 kV line to increase the emergency rating	AEP (100%)
b1420	A sag study will be required to increase the emergency rating for this line. Depending on the outcome of this study, more action may be required in order to increase the rating	AEP (100%)
b1421	Perform a sag study on the Sorenson – McKinley 138 kV line to increase the emergency rating	AEP (100%)
b1422	Perform a sag study on John Amos – St. Albans 138 kV line to allow for operation up to its conductor emergency rating	AEP (100%)
b1423	A sag study will be performed on the Chemical – Capitol Hill 138 kV line to determine if the emergency rating can be utilized	AEP (100%)
b1424	Perform a sag study for Benton Harbor – West Street – Hartford 138 kV line to improve the emergency rating	AEP (100%)
b1425	Perform a sag study for the East Monument – East Danville 138 kV line to allow for operation up to the conductor's maximum operating temperature	AEP (100%)
b1426	Perform a sag study for the Reusens – Graves 138 kV line to allow for operation up to the conductor's maximum operating temperature	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1427 Perform a sag study on Smith Mountain – Leesville – Altavista – Otter 138 kV and on Boones – Forest – New London – JohnsMT – Otter		AEP (100%)
b1428 Perform a sag study on Smith Mountain – Candler's Mountain 138 kV and Joshua Falls – Cloverdale 765 kV to allow for operation up to		AEP (100%)
b1429 Perform a sag study on Fremont – Clinch River 138 kV to allow for operation up to its conductor emergency ratings		AEP (100%)
b1430 Install a new 138 kV circuit breaker at Benton Harbor station and move the load from Watervliet 34.5 kV station to West street 138 kV		AEP (100%)
b1432 Perform a sag study on the Kenova – Tri State 138 kV line to allow for operation up to their conductor emergency rating		AEP (100%)
b1433 Replace risers in the West Huntington Station to increase the line ratings which would eliminate the overloads for the contingencies listed		AEP (100%)
b1434 Perform a sag study on the line from Desoto to Madison. Replace bus and risers at Daleville station and replace bus and risers at Madison		AEP (100%)
b1435 Replace the 2870 MCM ACSR riser at the Sporn station		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1436	Perform a sag study on the Sorenson – Illinois Road 138 kV line to increase the emergency MOT for this line. Replace bus and risers at Illinois Road	AEP (100%)
b1437	Perform sag study on Rock Cr. – Hummel Cr. 138 kV to increase the emergency MOT for the line, replace bus and risers at Huntington J., and replace relays for Hummel Cr. – Hunt – Soren. Line at Soren	AEP (100%)
b1438	Replacement of risers at McKinley and Industrial Park stations and performance of a sag study for the 4.53 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1439	By replacing the risers at Lincoln both the Summer Normal and Summer Emergency ratings will improve to 268 MVA	AEP (100%)
b1440	By replacing the breakers at Lincoln the Summer Emergency rating will improve to 251 MVA	AEP (100%)
b1441	Replacement of risers at South Side and performance of a sag study for the 1.91 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1442	Replacement of 954 ACSR conductor with 1033 ACSR and performance of a sag study for the 4.54 miles of 2-636 ACSR section is expected	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1443	Station work at Thelma and Busseyville Stations will be performed to replace bus and risers	AEP (100%)
b1444	Perform electrical clearance studies on Clinch River – Clinchfield 139 kV line (a.k.a. sag studies) to determine if the emergency ratings can be utilized	AEP (100%)
b1445	Perform a sag study on the Addison (Buckeye CO-OP) – Thinever and North Crown City – Thivener 138 kV sag study and switch	AEP (100%)
b1446	Perform a sag study on the Parkersburg (Allegheny Power) – Belpre (AEP) 138 kV	AEP (100%)
b1447	Dexter – Elliot tap 138 kV sag check	AEP (100%)
b1448	Dexter – Meigs 138 kV Electrical Clearance Study	AEP (100%)
b1449	Meigs tap – Rutland 138 kV sag check	AEP (100%)
b1450	Muskingum – North Muskingum 138 kV sag check	AEP (100%)
b1451	North Newark – Sharp Road 138 kV sag check	AEP (100%)
b1452	North Zanesville – Zanesville 138 kV sag check	AEP (100%)
b1453	North Zanesville – Powelson and Ohio Central – Powelson 138 kV sag check	AEP (100%)
b1454	Perform an electrical clearance study on the Ross – Delano – Scioto Trail 138 kV line to determine if the emergency rating can be utilized	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1455	Perform a sag check on the Sunny – Canton Central – Wagenhals 138 kV line to determine if all circuits can be operated at their summer emergency rating		AEP (100%)
b1456	The Tidd – West Bellaire 345 kV circuit has been de-rated to its normal rating and would need an electrical clearance study to determine if the emergency rating can be utilized		AEP (100%)
b1457	The Tiltonsville – Windsor 138 kV circuit has been derated to its normal rating and would need an electrical clearance study to determine if the emergency rating could be utilized		AEP (100%)
b1458	Install three new 345 kV breakers at Bixby to separate the Marquis 345 kV line and transformer #2. Operate Circleville – Harrison 138 kV and Harrison – Zuber 138 kV up to conductor emergency ratings		AEP (100%)
b1459	Several circuits have been de-rated to their normal conductor ratings and could benefit from electrical clearance studies to determine if the emergency rating could be utilized		AEP (100%)
b1460	Replace 2156 & 2874 risers		AEP (100%)
b1461	Replace meter, metering CTs and associated equipment at the Paden City feeder		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1462	Replace relays at both South Cadiz 138 kV and Tidd 138 kV	AEP (100%)
b1463	Reconductor the Bexley – Groves 138 kV circuit	AEP (100%)
b1464	Corner 138 kV upgrades	AEP (100%)
b1465.1	Add a 3rd 2250 MVA 765/345 kV transformer at Sullivan station	AEC (0.71%) / AEP (75.06%) / APS (1.25%) / BGE (1.81%) / ComEd (5.91%) / Dayton (0.86%) / DL (1.23%) / DPL (0.95%) / Dominion (3.89%) / JCPL (1.58%) / NEPTUNE (0.15%) / HTP (0.07%) / PECO (2.08%) / PEPCO (1.66%) / ECP (0.07%)** / PSEG (2.62%) / RE (0.10%)
b1465.2	Replace the 100 MVAR 765 kV shunt reactor bank on Rockport – Jefferson 765 kV line with a 300 MVAR bank at Rockport Station	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1465.3	Transpose the Rockport – Sullivan 765 kV line and the Rockport – Jefferson 765 kV line	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEP (100%)</p>

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1465.4	Make switching improvements at Sullivan and Jefferson 765 kV stations	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (100%)
b1466.1	Create an in and out loop at Adams Station by removing the hard tap that currently exists	AEP (100%)
b1466.2	Upgrade the Adams transformer to 90 MVA	AEP (100%)
b1466.3	At Seaman Station install a new 138 kV bus and two new 138 kV circuit breakers	AEP (100%)
b1466.4	Convert South Central Co-op's New Market 69 kV Station to 138 kV	AEP (100%)
b1466.5	The Seaman – Highland circuit is already built to 138 kV, but is currently operating at 69 kV, which would now increase to 138 kV	AEP (100%)
b1466.6	At Highland Station, install a new 138 kV bus, three new 138 kV circuit breakers and a new 138/69 kV 90 MVA transformer	AEP (100%)
b1466.7	Using one of the bays at Highland, build a 138 kV circuit from Hillsboro – Highland 138 kV, which is approximately 3 miles	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1467.1	Install a 14.4 MVar Capacitor Bank at New Buffalo station	AEP (100%)
b1467.2	Reconfigure the 138 kV bus at LaPorte Junction station to eliminate a contingency resulting in loss of two 138 kV sources serving the LaPorte area	AEP (100%)
b1468.1	Expand Selma Parker Station and install a 138/69/34.5 kV transformer	AEP (100%)
b1468.2	Rebuild and convert 34.5 kV line to Winchester to 69 kV, including Farmland Station	AEP (100%)
b1468.3	Retire the 34.5 kV line from Haymond to Selma Wire	AEP (100%)
b1469.1	Conversion of the Newcomerstown – Cambridge 34.5 kV system to 69 kV operation	AEP (100%)
b1469.2	Expansion of the Derwent 69 kV Station (including reconfiguration of the 69 kV system)	AEP (100%)
b1469.3	Rebuild 11.8 miles of 69 kV line, and convert additional 34.5 kV stations to 69 kV operation	AEP (100%)
b1470.1	Build a new 138 kV double circuit off the Kanawha – Bailysville #2 138 kV circuit to Skin Fork Station	AEP (100%)
b1470.2	Install a new 138/46 kV transformer at Skin Fork	AEP (100%)
b1470.3	Replace 5 Moab's on the Kanawha – Baileysville line with breakers at the Sundial 138 kV station	AEP (100%)
b1471	Perform a sag study on the East Lima – For Lima – Rockhill 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1472	Perform a sag study on the East Lima – Haviland 138 kV line to increase the emergency rating	AEP (100%)
b1473	Perform a sag study on the East New Concord – Muskingum River section of the Muskingum River – West Cambridge 138 kV circuit	AEP (100%)
b1474	Perform a sag study on the Ohio Central – Prep Plant tap 138 kV circuit	AEP (100%)
b1475	Perform a sag study on the S73 – North Delphos 138 kV line to increase the emergency rating	AEP (100%)
b1476	Perform a sag study on the S73 – T131 138 kV line to increase the emergency rating	AEP (100%)
b1477	The Natrium – North Martin 138 kV circuit would need an electrical clearance study among other equipment upgrades	AEP (100%)
b1478	Upgrade Strouds Run – Strouds Tap 138 kV relay and riser	AEP (100%)
b1479	West Hebron station upgrades	AEP (100%)
b1480	Perform upgrades and a sag study on the Corner – Layman 138 kV section of the Corner – Muskingum River 138 kV circuit	AEP (100%)
b1481	Perform a sag study on the West Lima – Eastown Road – Rockhill 138 kV line and replace the 138 kV risers at Rockhill station to increase the emergency rating	AEP (100%)
b1482	Perform a sag study for the Albion – Robison Park 138 kV line to increase its emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1483	Sag study 1 mile of the Clinch River – Saltville 138 kV line and replace the risers and bus at Clinch River, Lebanon, and Elk Garden Stations	AEP (100%)
b1484	Perform a sag study on the Hacienda – Harper 138 kV line to increase the emergency rating	AEP (100%)
b1485	Perform a sag study on the Jackson Road – Concord 183 kV line to increase the emergency rating	AEP (100%)
b1486	The Matt Funk – Poages Mill – Starkey 138 kV line requires	AEP (100%)
b1487	Perform a sag study on the New Carlisle – Trail Creek 138 kV line to increase the emergency rating	AEP (100%)
b1488	Perform a sag study on the Olive – LaPorte Junction 138 kV line to increase the emergency rating	AEP (100%)
b1489	A sag study must be performed for the 5.40 mile Tristate – Chadwick 138 kV line to determine if a higher emergency rating can be used	AEP (100%)
b1490.1	Establish a new 138/69 kV Butler Center station	AEP (100%)
b1490.2	Build a new 14 mile 138 kV line from Auburn station to Woods Road station VIA Butler Center station	AEP (100%)
b1490.3	Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer	AEP (100%)
b1490.4	Improve the switching arrangement at Kendallville station	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1491	Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line	AEP (100%)
b1492	Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR	AEP (100%)
b1493	Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating	AEP (100%)
b1494	Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to increase its emergency rating	AEP (100%)
b1495	Add an additional 765/345 kV transformer at Baker Station	AEC (0.41%) / AEP (87.22%) / BGE (1.03%) / ComEd (3.38%) / Dayton (1.23%) / DL (1.46%) / DPL (0.54%) / JCPL (0.90%) / NEPTUNE (0.09%) / HTP (0.04%) / PECO (1.18%) / PEPCO (0.94%) / ECP** (0.04%) / PSEG (1.48%) / RE (0.06%)
b1496	Replace 138 kV bus and risers at Johnson Mountain Station	AEP (100%)
b1497	Replace 138 kV bus and risers at Leesville Station	AEP (100%)
b1498	Replace 138 kV risers at Wurno Station	AEP (100%)
b1499	Perform a sag study on Sporn A – Gavin 138 kV to determine if the emergency rating can be improved	AEP (100%)
b1500	The North East Canton – Wagenhals 138 kV circuit would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1501	The Moseley – Reusens 138 kV circuit requires a sag study to determine if the emergency rating can be utilized to address a thermal loading issue for a category C3		AEP (100%)
b1502	Reconductor the Conesville East – Conesville Prep Plant Tap 138 kV section of the Conesville – Ohio Central to fix Reliability N-1-1 thermal overloads		AEP (100%)
b1659	Establish Sorenson 345/138 kV station as a 765/345 kV station		AEP (93.61%) / ATSI (2.99%) / ComEd (2.07%) / HTP (0.03%) / PENELEC (0.31%) / ECP** (0.03%) / PSEG (0.92%) / RE (0.04%)
b1659.1	Replace Sorenson 138 kV breaker 'L1'		AEP (100%)
b1659.2	Replace Sorenson 138 kV breaker 'L2' breaker		AEP (100%)
b1659.3	Replace Sorenson 138 kV breaker 'M1'		AEP (100%)
b1659.4	Replace Sorenson 138 kV breaker 'M2'		AEP (100%)
b1659.5	Replace Sorenson 138 kV breaker 'N1'		AEP (100%)
b1659.6	Replace Sorenson 138 kV breaker 'N2'		AEP (100%)
b1659.7	Replace Sorenson 138 kV breaker 'O1'		AEP (100%)
b1659.8	Replace Sorenson 138 kV breaker 'O2'		AEP (100%)
b1659.9	Replace Sorenson 138 kV breaker 'M'		AEP (100%)
b1659.10	Replace Sorenson 138 kV breaker 'N'		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1659.11	Replace Sorenson 138 kV breaker 'O'	AEP (100%)
b1659.12	Replace McKinley 138 kV breaker 'L1'	AEP (100%)
b1659.13	Establish 765 kV yard at Sorenson and install four 765 kV breakers	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (74.58%) / Dayton (7.99%) / DEOK (17.43%)
b1659.14	Build approximately 14 miles of 765 kV line from existing Dumont - Marysville line	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (63.61%) / ATSI (22.53%) / ComEd (0.01%) / Dayton (6.83%) / DL (7.02%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1660	Install a 765/500 kV transformer at Cloverdale	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> APS (33.80%) / BGE (26.47%) / PEPCO (39.73%)
b1661	Install a 765 kV circuit breaker at Wyoming station	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> AEP (100%)
b1662	Rebuild 4 miles of 46 kV line to 138 kV from Pemberton to Cherry Creek	AEP (100%)
b1662.1	Circuit Breakers are installed at Cherry Creek (facing Pemberton) and at Pemberton (facing Tams Mtn. and Cherry Creek)	AEP (100%)
b1662.2	Install three 138 kV breakers at Grandview Station (facing Cherry Creek, Hinton, and Bradley Stations)	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1662.3	Remove Sullivan Switching Station (46 kV)	AEP (100%)
b1663	Install a new 765/138 kV transformer at Jackson Ferry substation	AEP (100%)
b1663.1	Establish a new 10 mile double circuit 138 kV line between Jackson Ferry and Wythe	AEP (100%)
b1663.2	Install 2 765 kV circuit breakers, breaker disconnect switches and associated bus work for the new 765 kV breakers, and new relays for the 765 kV breakers at Jackson's Ferry	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (100%)
b1664	Install switched capacitor banks at Kenwood 138 kV stations	AEP (100%)
b1665	Install a second 138/69 kV transformer at Thelma station	AEP (100%)
b1665.1	Construct a single circuit 69 kV line from West Paintsville to the new Paintsville station	AEP (100%)
b1665.2	Install new 7.2 MVAR, 46 kV bank at Kenwood Station	AEP (100%)
b1666	Build an 8 breaker 138 kV station tapping both circuits of the Fostoria - East Lima 138 kV line	AEP (90.65%) / Dayton (9.35%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1667	Establish Melmore as a switching station with both 138 kV circuits terminating at Melmore. Extend the double circuit 138 kV line from Melmore to Fremont Center	AEP (100%)
b1668	Revise the capacitor setting at Riverside 138 kV station	AEP (100%)
b1669	Capacitor setting changes at Ross 138 kV stations	AEP (100%)
b1670	Capacitor setting changes at Wooster 138 kV station	AEP (100%)
b1671	Install four 138 kV breakers in Danville area	AEP (100%)
b1676	Replace Natrium 138 kV breaker 'G (rehab)'	AEP (100%)
b1677	Replace Huntley 138 kV breaker '106'	AEP (100%)
b1678	Replace Kammer 138 kV breaker 'G'	AEP (100%)
b1679	Replace Kammer 138 kV breaker 'H'	AEP (100%)
b1680	Replace Kammer 138 kV breaker 'J'	AEP (100%)
b1681	Replace Kammer 138 kV breaker 'K'	AEP (100%)
b1682	Replace Kammer 138 kV breaker 'M'	AEP (100%)
b1683	Replace Kammer 138 kV breaker 'N'	AEP (100%)
b1684	Replace Clinch River 138 kV breaker 'E1'	AEP (100%)
b1685	Replace Lincoln 138 kV breaker 'D'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1687	Advance s0251.7 (Replace Corrid 138 kV breaker '104S')	AEP (100%)
b1688	Advance s0251.8 (Replace Corrid 138 kV breaker '104C')	AEP (100%)
b1712.1	Perform sag study on Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1712.2	Rebuild the Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1733	Perform a sag study of the Bluff Point - Jauby 138 kV line. Upgrade breaker, wavetrapp, and risers at the terminal ends	AEP (100%)
b1734	Perform a sag study of Randolph - Hodgins 138 kV line. Upgrade terminal equipment	AEP (100%)
b1735	Perform a sag study of R03 - Magely 138 kV line. Upgrade terminal equipment	AEP (100%)
b1736	Perform a sag study of the Industrial Park - Summit 138 kV line	AEP (100%)
b1737	Sag study of Newcomerstown - Hillview 138 kV line. Upgrade - terminal equipment	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1738	Perform a sag study of the Wolf Creek - Layman 138 kV line. - Upgrade terminal equipment including a 138 kV breaker and wavetrap	AEP (100%)
b1739	Perform a sag study of the Ohio Central - West Trinway 138 kV line	AEP (100%)
b1741	Replace Beatty 138 kV breaker '2C(IPP)'	AEP (100%)
b1742	Replace Beatty 138 kV breaker '1E'	AEP (100%)
b1743	Replace Beatty 138 kV breaker '2E'	AEP (100%)
b1744	Replace Beatty 138 kV breaker '3C'	AEP (100%)
b1745	Replace Beatty 138 kV breaker '2W'	AEP (100%)
b1746	Replace St. Claire 138 kV breaker '8'	AEP (100%)
b1747	Replace Cloverdale 138 kV breaker 'C'	AEP (100%)
b1748	Replace Cloverdale 138 kV breaker 'D1'	AEP (100%)
b1780	Install two 138kV breakers and two 138kV circuit switchers at South Princeton Station and one 138kV breaker and one 138kV circuit switcher at Switchback Station	AEP (100%)
b1781	Install three 138 kV breakers and a 138kV circuit switcher at Trail Fork Station in Pineville, WV	AEP (100%)
b1782	Install a 46kV Moab at Montgomery Station facing Carbondale (on the London - Carbondale 46 kV circuit)	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1783	Add two 138 kV Circuit Breakers and two 138 kV circuit switchers on the Lonesome Pine - South Bluefield 138 kV line	AEP (100%)
b1784	Install a 52.8 MVAR capacitor bank at the Clifford 138 kV station	AEP (100%)
b1811.1	Perform a sag study of 4 miles of the Waterford - Muskingum line	AEP (100%)
b1811.2	Rebuild 0.1 miles of Waterford - Muskingum 345 kV with 1590 ACSR	AEP (100%)
b1812	Reconductor the AEP portion of the South Canton - Harmon 345 kV with 954 ACSR and upgrade terminal equipment at South Canton. Expected rating is 1800 MVA S/N and 1800 MVA S/E	AEP (100%)
b1817	Install (3) 345 kV circuit breakers at East Elkhart station in ring bus designed as a breaker and half scheme	AEP (100%)
b1818	Expand the Allen station by installing a second 345/138 kV transformer and adding four 138 kV exits by cutting in the Lincoln - Sterling and Milan - Timber Switch 138 kV double circuit tower line	AEP (88.30%) / ATSI (8.86%) / Dayton (2.84%)
b1819	Rebuild the Robinson Park - Sorenson 138 kV line corridor as a 345 kV double circuit line with one side operated at 345 kV and one side at 138 kV	AEP (87.18%) / ATSI (10.06%) / Dayton (2.76%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1859	Perform a sag study for Hancock - Cave Spring - Roanoke 138 kV circuit to reach new SE ratings of 272MVA (Cave Spring-Hancock), 205MVA (Cave Spring-Sunscape), 245MVA (ROANO2-Sunscape)	AEP (100%)
b1860	Perform a sag study on the Crooksville - Spencer Ridge section (14.3 miles) of the Crooksville-Poston-Strouds Run 138 kV circuit to see if any remedial action needed to reach the SE rating (175MVA)	AEP (100%)
b1861	Reconductor 0.83 miles of the Dale - West Canton 138 kV Tie-line and upgrade risers at West Canton 138 kV	AEP (100%)
b1862	Perform a sag study on the Grant - Greentown 138 kV circuit and replace the relay CT at Grant 138 kV station to see if any remedial action needed to reach the new ratings of 251/286MVA	AEP (100%)
b1863	Perform a sag study of the Kammer - Wayman SW 138 kV line to see if any remedial action needed to reach the new SE rating of 284MVA	AEP (100%)
b1864.1	Add two additional 345/138 kV transformers at Kammer	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.2	Add second West Bellaire - Brues 138 kV circuit	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.3	Replace Kammer 138 kV breaker 'E'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1865	Perform a sag study on the Kanawha - Carbondale 138 kV line to see if any remedial action needed to reach the new ratings of 251/335MVA	AEP (100%)
b1866	Perform a sag study on the Clinch River-Lock Hart-Dorton 138kV line,increase the Relay Compliance Trip Limit at Clinch River on the C.R.-Dorton 138kV line to 310 and upgrade the risers with 1590ACSR	AEP (100%)
b1867	Perform a sag study on the Newcomerstown - South Coshocton 138 kV line to see if any remedial action is needed to reach the new SE rating of 179MVA	AEP (100%)
b1868	Perform sag study on the East Lima - new Liberty 138 kV line to see if any remedial action is needed to reach the new SE rating of 219MVA	AEP (100%)
b1869	Perform a sag study of the Ohio Central - South Coshocton 138 kV circuit to see if any remedial action needed to reach the new SE ratings of 250MVA	AEP (100%)
b1870	Replace the Ohio Central transformer #1 345/138/12 kV 450 MVA for a 345/138/34.5 kV 675 MVA transformer	AEP (68.16%) / ATSI (25.27%) / Dayton (3.88%) / PENELEC (1.59%) / DEOK (1.10%)
b1871	Perform a sag study on the Central - West Coshocton 138 kV line (improving the emergency rating of this line to 254 MVA)	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1872 Add a 57.6 MVAR capacitor bank at East Elkhart 138 kv station in Indiana		AEP (100%)
b1873 Install two 138 kV circuit breakers at Cedar Creek Station and primary side circuit switcher on the 138/69/46 kV transformer		AEP (100%)
b1874 Install two 138 kV circuit breakers and one 138 kV circuit switcher at Magely 138 kV station in Indiana		AEP (100%)
b1875 Build 25 miles of new 138 kV line from Bradley Station through Tower 117 Station and terminating at McClung 138 kV station. Existing 69 kV distribution transformers will be replaced with 138 kV transformers		AEP (100%)
b1876 Install a 14.4 MVAR capacitor bank at Capital Avenue (AKA Currant Road) 34.5 kV bus		AEP (100%)
b1877 Relocate 138 kV Breaker G to the West Kingsport - Industry Drive 138 kV line and Remove 138 kV MOAB		AEP (100%)
b1878 Perform a sag study on the Lincoln - Robinson Park 138 kV line (Improve the emergency rating to 244 MVA)		AEP (100%)
b1879 Perform a sag study on the Hansonville - Meadowview 138 kV line (Improve the emergency rating to 245 MVA)		AEP (100%)
b1880 Rebuild the 15 miles of the Moseley - Roanoke 138 kV line. This project would consist of rebuilding both circuits on the double circuit line		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1881	Replace existing 600 Amp switches, station risers and increase the CT ratios associated with breaker 'G' at Sterling 138 kV Station. It will increase the rating to 296 MVA S/N and 384 MVA S/E	AEP (100%)
b1882	Perform a sag study on the Bluff Point - Randolph 138 kV line to see if any remedial action needed to reach the new SE rating of 255 MVA	AEP (100%)
b1883	Switch the breaker position of transformer #1 and SW Lima at East Lima 345 kV bus	AEP (100%)
b1884	Perform a sag study on Strawton station - Fisher Body - Deer Creek 138 kV line to see if any remedial action needed to reach the new SE rating of 250 MVA	AEP (100%)
b1887	Establish a new 138/69 kV source at Carrollton and construct two new 69 kV lines from Carrollton to tie into the Dennison - Miller SW 69 kV line and to East Dover 69 kV station respectively	AEP (100%)
b1888	Install a 69 kV line breaker at Blue Pennant 69 kV Station facing Bim Station and 14.4 MVAR capacitor bank	AEP (100%)
b1889	Install a 43.2 MVAR capacitor bank at Hinton 138 kV station (APCO WV)	AEP (100%)
b1901	Rebuild the Ohio Central - West Trinway (4.84 miles) section of the Academia - Ohio Central 138 kV circuit. Upgrade the Ohio Central riser, Ohio Central switch and the West Trinway riser	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1904.1	Construct new 138/69 Michiana Station near Bridgman by tapping the new Carlisle - Main Street 138 kV and the Bridgman - Buchanan Hydro 69 kV line	AEP (100%)
b1904.2	Establish a new 138/12 kV New Galien station by tapping the Olive - Hickory Creek 138 kV line	AEP (100%)
b1904.3	Retire the existing Galien station and move its distribution load to New Galien station. Retire the Buchanan Hydro - New Carlisle 34.5 kV line	AEP (100%)
b1904.4	Implement an in and out scheme at Cook 69 kV by eliminating the Cook 69 kV tap point and by installing two new 69 kV circuit breakers	AEP (100%)
b1904.5	Rebuild the Bridgman - Cook 69 kV and the Derby - Cook 69 kV lines	AEP (100%)
b1946	Perform a sag study on the Brues – West Bellaire 138 kV line	AEP (100%)
b1947	A sag study of the Dequine - Meadowlake 345 kV line #1 line may improve the emergency rating to 1400 MVA	AEP (100%)
b1948	Establish a new 765/345 interconnection at Sporn. Install a 765/345 kV transformer at Mountaineer and build ¾ mile of 345 kV to Sporn	ATSI (61.08%) / DL (21.87%) / Dominion (13.97%) / PENELEC (3.08%)
b1949	Perform a sag study on the Grant Tap – Deer Creek 138 kV line and replace bus and risers at Deer Creek station	AEP (100%)
b1950	Perform a sag study on the Kammer – Ormet 138 kV line of the conductor section	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1951	Perform a sag study of the Maddox- Convoy 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1952	Perform a sag study of the Maddox – T130 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1953	Perform a sag study of the Meadowlake - Olive 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1954	Perform a sag study on the Milan - Harper 138 kV line and replace bus and switches at Milan Switch station	AEP (100%)
b1955	Perform a sag study of the R-049 - Tillman 138 kV line may improve the emergency rating to 245 MVA	AEP (100%)
b1956	Perform a sag study of the Tillman - Dawkins 138 kV line may improve the emergency rating to 245 MVA	AEP (100%)
b1957	Terminate Transformer #2 at SW Lima in a new bay position	AEP (69.41%) / ATSI (23.11%) / ECP** (0.17%) / HTP (0.19%) / PENELEC (2.42%) / PSEG (4.52%) / RE (0.18%)
b1958	Perform a sag study on the Brookside - Howard 138 kV line and replace bus and risers at AEP Howard station	AEP (100%)
b1960	Sag Study on 7.2 miles SE Canton-Canton Central 138kV ckt	AEP (100%)
b1961	Sag study on the Southeast Canton – Sunnyside 138kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1962	Add four 765 kV breakers at Kammer	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> AEP (100%)
b1963	Build approximately 1 mile of circuit comprising of 2-954 ACSR to get the rating of Waterford-Muskinum 345 kV higher	AEP (100%)
b1970	Reconductor 13 miles of the Kammer – West Bellaire 345kV circuit	APS (33.51%) / ATSI (32.21%) / DL (18.64%) / Dominion (6.01%) / ECP** (0.10%) / HTP (0.11%) / JCPL (1.68%) / Neptune* (0.18%) / PENELEC (4.58%) / PSEG (2.87%) / RE (0.11%)
b1971	Perform a sag study to improve the emergency rating on the Bridgville – Chandlersville 138 kV line	AEP (100%)
b1972	Replace disconnect switch on the South Canton 765/345 kV transformer	AEP (100%)
b1973	Perform a sag study to improve the emergency rating on the Carrollton – Sunnyside 138 kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1974	Perform a sag study to improve the emergency rating on the Bethel Church – West Dover 138 kV line	AEP (100%)
b1975	Replace a switch at South Millersburg switch station	AEP (100%)
b2017	Reconductor or rebuild Sporn - Waterford - Muskingum River 345 kV line	ATSI (37.04%) / AEP (34.35%) / DL (10.41%) / Dominion (6.19%) / APS (3.94%) / PENELEC (3.09%) / JCPL (1.39%) / Dayton (1.20%) / Neptune* (0.14%) / HTP (0.09%) / ECP** (0.08%) / PSEG (2.00%) / RE (0.08%)
b2018	Loop Conesville - Bixby 345 kV circuit into Ohio Central	ATSI (58.58%) / AEP (14.16%) / APS (12.88%) / DL (7.93%) / PENELEC (5.73%) / Dayton (0.72%)
b2019	Establish Burger 345/138 kV station	AEP (93.74%) / APS (4.40%) / DL (1.11%) / ATSI (0.74%) / PENELEC (0.01%)
b2020	Rebuild Amos - Kanawah River 138 kV corridor	AEP (88.39%) / APS (7.12%) / ATSI (2.89%) / DEOK (1.58%) / PEPCO (0.02%)
b2021	Add 345/138 transformer at Sporn, Kanawah River & Muskingum River stations	AEP (91.92%) / DEOK (3.60%) / APS (2.19%) / ATSI (1.14%) / DL (1.08%) / PEPCO (0.04%) / BGE (0.03%)
b2021.1	Replace Kanawah 138 kV breaker 'L'	AEP (100%)
b2021.2	Replace Muskingum 138 kV breaker 'HG'	AEP (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2021.3	Replace Muskingum 138 kV breaker 'HJ'	AEP (100%)
b2021.4	Replace Muskingum 138 kV breaker 'HE'	AEP (100%)
b2021.5	Replace Muskingum 138 kV breaker 'HD'	AEP (100%)
b2021.6	Replace Muskingum 138 kV breaker 'HF'	AEP (100%)
b2021.7	Replace Muskingum 138 kV breaker 'HC'	AEP (100%)
b2021.8	Replace Sporn 138 kV breaker 'D1'	AEP (100%)
b2021.9	Replace Sporn 138 kV breaker 'D2'	AEP (100%)
b2021.10	Replace Sporn 138 kV breaker 'F1'	AEP (100%)
b2021.11	Replace Sporn 138 kV breaker 'F2'	AEP (100%)
b2021.12	Replace Sporn 138 kV breaker 'G'	AEP (100%)
b2021.13	Replace Sporn 138 kV breaker 'G2'	AEP (100%)
b2021.14	Replace Sporn 138 kV breaker 'N1'	AEP (100%)
b2021.15	Replace Kanawah 138 kV breaker 'M'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2022	Terminate Tristate - Kyger Creek 345 kV line at Sporn	AEP (97.99%) / DEOK (2.01%)
b2027	Perform a sag study of the Tidd - Collier 345 kV line	AEP (100%)
b2028	Perform a sag study on East Lima - North Woodcock 138 kV line to improve the rating	AEP (100%)
b2029	Perform a sag study on Bluebell - Canton Central 138 kV line to improve the rating	AEP (100%)
b2030	Install 345 kV circuit breakers at West Bellaire	AEP (100%)
b2031	Sag study on Tilton - W. Bellaire section 1 (795 ACSR), about 12 miles	AEP (100%)
b2032	Rebuild 138 kV Elliot tap - Poston line	ATSI (73.02%) / Dayton (19.39%) / DL (7.59%)
b2033	Perform a sag study of the Brues - W. Bellaire 138 kV line	AEP (100%)
b2046	Adjust tap settings for Muskingum River transformers	AEP (100%)
b2047	Replace relay at Greenlawn	AEP (100%)
b2048	Replace both 345/138 kV transformers with one bigger transformer	AEP (92.49%) / Dayton (7.51%)
b2049	Replace relay	AEP (100%)
b2050	Perform sag study	AEP (100%)
b2051	Install 3 138 kV breakers and a circuit switcher at Dorton station	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2052	Replace transformer		AEP (67.17%) / ATSI (27.37%) / Dayton (3.73%) / PENELEC (1.73%)
b2054	Perform a sag study of Sporn - Rutland 138 kV line		AEP (100%)
b2069	Replace George Washington 138 kV breaker 'A' with 63kA rated breaker		AEP (100%)
b2070	Replace Harrison 138 kV breaker '6C' with 63kA rated breaker		AEP (100%)
b2071	Replace Lincoln 138 kV breaker 'L' with 63kA rated breaker		AEP (100%)
b2072	Replace Natrum 138 kV breaker 'T' with 63kA rated breaker		AEP (100%)
b2073	Replace Darrah 138 kV breaker 'B' with 63kA rated breaker		AEP (100%)
b2074	Replace Wyoming 138 kV breaker 'G' with 80kA rated breaker		AEP (100%)
b2075	Replace Wyoming 138 kV breaker 'G1' with 80kA rated breaker		AEP (100%)
b2076	Replace Wyoming 138 kV breaker 'G2' with 80kA rated breaker		AEP (100%)
b2077	Replace Wyoming 138 kV breaker 'H' with 80kA rated breaker		AEP (100%)
b2078	Replace Wyoming 138 kV breaker 'H1' with 80kA rated breaker		AEP (100%)
b2079	Replace Wyoming 138 kV breaker 'H2' with 80kA rated breaker		AEP (100%)
b2080	Replace Wyoming 138 kV breaker 'J' with 80kA rated breaker		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2081	Replace Wyoming 138 kV breaker 'J1' with 80kA rated breaker		AEP (100%)
b2082	Replace Wyoming 138 kV breaker 'J2' with 80kA rated breaker		AEP (100%)
b2083	Replace Natrum 138 kV breaker 'K' with 63kA rated breaker		AEP (100%)
b2084	Replace Tanner Creek 345 kV breaker 'P' with 63kA rated breaker		AEP (100%)
b2085	Replace Tanner Creek 345 kV breaker 'P2' with 63kA rated breaker		AEP (100%)
b2086	Replace Tanner Creek 345 kV breaker 'Q1' with 63kA rated breaker		AEP (100%)
b2087	Replace South Bend 138 kV breaker 'T' with 63kA rated breaker		AEP (100%)
b2088	Replace Tidd 138 kV breaker 'L' with 63kA rated breaker		AEP (100%)
b2089	Replace Tidd 138 kV breaker 'M2' with 63kA rated breaker		AEP (100%)
b2090	Replace McKinley 138 kV breaker 'A' with 40kA rated breaker		AEP (100%)
b2091	Replace West Lima 138 kV breaker 'M' with 63kA rated breaker		AEP (100%)
b2092	Replace George Washington 138 kV breaker 'B' with 63kA rated breaker		AEP (100%)
b2093	Replace Turner 138 kV breaker 'W' with 63kA rated breaker		AEP (100%)
b2135	Build a new 138 kV line from Falling Branch to Merrimac and add a 138/69 kV transformer at Merrimac Station		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2160 Add a fourth circuit breaker to the station being built for the U4-038 project (Conelley), rebuild U4-038 - Grant Tap line as double circuit tower line		AEP (100%)
b2161 Rebuild approximately 20 miles of the Allen - S073 double circuit 138 kV line (with one circuit from Allen - Tillman - Timber Switch - S073 and the other circuit from Allen - T-131 - S073) utilizing 1033 ACSR		AEP (100%)
b2162 Perform a sag study to improve the emergency rating of the Belpre - Degussa 138 kV line		AEP (100%)
b2163 Replace breaker and wavetrapp at Jay 138 kV station		AEP (100%)

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## SCHEDULE 12 – APPENDIX

### (20) Virginia Electric and Power Company

Required Transmission Enhancements		Annual Revenue Requirement*** Responsible Customer(s)	
b0217	Upgrade Mt. Storm - Doubs 500kV		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> APS (19.55%) / BGE (15.30%) / Dominion (48.38%) / PEPCO (16.77%)
b0222	Install 150 MVAR capacitor at Loudoun 500 kV		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> BGE (7.93%) / Dominion (76.09) / PEPCO (15.98%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

\*\*\* The Annual Revenue Requirement for all Virginia Electric and Power Company projects in this Section 20 shall be as specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B.

**Virginia Electric and Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0223	Install 150 MVAR capacitor at Asburn 230 kV	Dominion (100%)
b0224	Install 150 MVAR capacitor at Dranesville 230 kV	Dominion (100%)
b0225	Install 33 MVAR capacitor at Possum Pt. 115 kV	Dominion (100%)
b0226	Install 500/230 kV transformer at Clifton and Clifton 500 kV 150 MVAR capacitor	As specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B APS (3.69%) / BGE (3.54%) / Dominion (85.73%) / PEPSCO (7.04%)
b0227	Install 500/230 kV transformer at Bristers; build new 230 kV Bristers-Gainsville circuit, upgrade two Loudoun-Brambleton circuits	AEC (0.71%) / APS (3.35%) / BGE (10.92%) / ConEd (0.10%) / DPL (1.66%) / Dominion (67.31%) / ME (0.89%) / PECO (2.33%) / PEPSCO (12.19%) / PPL (0.54%)
b0227.1	Loudoun Sub – upgrade 6-230 kV breakers	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0231	Install 500 kV breakers & 500 kV bus work at Suffolk	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> Dominion (100%)
b0231.2	Install 500/230 kV Transformer, 230 kV breakers, & 230 kV bus work at Suffolk	Dominion (100%)
b0232	Install 150 MVAR capacitor at Lynnhaven 230 kV	Dominion (100%)
b0233	Install 150 MVAR capacitor at Landstown 230 kV	Dominion (100%)
b0234	Install 150 MVAR capacitor at Greenwich 230 kV	Dominion (100%)
b0235	Install 150 MVAR capacitor at Fentress 230 kV	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0307	Reconductor Endless Caverns – Mt. Jackson 115 kV		Dominion (100%)
b0308	Replace L breaker and switches at Endless Caverns 115 kV		Dominion (100%)
b0309	Install SPS at Earleys 115 kV		Dominion (100%)
b0310	Reconductor Club House – South Hill and Chase City – South Hill 115 kV		Dominion (100%)
b0311	Reconductor Idylwood to Arlington 230 kV		Dominion (100%)
b0312	Reconductor Gallows to Ox 230 kV		Dominion (100%)
b0325	Install a 2 <sup>nd</sup> Everetts 230/115 kV transformer		Dominion (100%)
b0326	Uprate/resag Remington-Brandywine-Culppr 115 kV		Dominion (100%)
b0327	Build 2 <sup>nd</sup> Harrisonburg – Valley 230 kV		APS (19.79%) / Dominion (76.18%) / PEPSCO (4.03%)
b0328.1	Build new Meadow Brook – Loudoun 500 kV circuit (30 of 50 miles)		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPSCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> BGE (7.93%) / Dominion (76.09%) / PEPSCO (15.98%)

\* Neptune Regional Transmission System, LLC

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0328.3	Upgrade Mt. Storm 500 kV substation		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> APS (30.37%) / Dominion (46.46%) / PEPCO (23.17%)
b0328.4	Upgrade Loudoun 500 kV substation		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> BGE (7.93%) / Dominion (76.09%) / PEPCO (15.98%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> Dominion (100%)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit	Dominion (100%)††
b0329.1	Replace Thole Street 115 kV breaker ‘48T196’	Dominion (100%)
b0329.2	Replace Chesapeake 115 kV breaker ‘T242’	Dominion (100%)
b0329.3	Replace Chesapeake 115 kV breaker ‘8722’	Dominion (100%)
b0329.4	Replace Chesapeake 115 kV breaker ‘16422’	Dominion (100%)
b0330	Install Crewe 115 kV breaker and shift load from line 158 to 98	Dominion (100%)
b0331	Upgrade/resag Shell Bank – Whealton 115 kV (Line 165)	Dominion (100%)

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† Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

†† Cost allocations associated with below 500 kV elements of the project

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0332	Uprate/resag Chesapeake – Cradock 115 kV		Dominion (100%)
b0333	Replace wave trap on Elmont – Replace (Line #231)		Dominion (100%)
b0334	Uprate/resag Iron Bridge-Walmsley-Southwest 230 kV		Dominion (100%)
b0335	Build Chase City – Clarksville 115 kV		Dominion (100%)
b0336	Reconductor one span of Chesapeake – Dozier 115 kV close to Dozier substation		Dominion (100%)
b0337	Build Lexington 230 kV ring bus		Dominion (100%)
b0338	Replace Gordonsville 230/115 kV transformer for larger one		Dominion (100%)
b0339	Install Breaker at Doods 230 kV Sub		Dominion (100%)
b0340	Reconductor one span Peninsula – Magruder 115 kV close to Magruder substation		Dominion (100%)
b0341	Install a breaker at Northern Neck 115 kV		Dominion (100%)
b0342	Replace Trowbridge 230/115 kV transformer		Dominion (100%)
b0403	2 <sup>nd</sup> Doods 500/230 kV transformer addition		APS (3.35%) / BGE (4.22%) / DPL (1.10%) / Dominion (83.94%) / PEPCO (7.39%)



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0412	Retension Pruntytown – Mt. Storm 500 kV to a 3502 MVA rating	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (20.86%) / BGE (24.68%) / PEPCO (54.46%)</p>
b0450	Install 150 MVAR Capacitor at Fredricksburg 230 kV	Dominion (100%)
b0451	Install 25 MVAR Capacitor at Somerset 115 kV	Dominion (100%)
b0452	Install 150 MVAR Capacitor at Northwest 230 kV	Dominion (100%)
b0453.1	Convert Remington – Sowego 115 kV to 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.2	Add Sowego – Gainsville 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.3	Add Sowego 230/115 kV transformer	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0454	Reconductor 2.4 miles of Newport News – Chuckatuck 230 kV	Dominion (100%)
b0455	Add 2 <sup>nd</sup> Endless Caverns 230/115 kV transformer	APS (32.70%) / BGE (7.01%) / DPL (1.80%) / Dominion (50.82%) / PEPCO (7.67%)
b0456	Reconductor 9.4 miles of Edinburg – Mt. Jackson 115 kV	APS (33.69%) / BGE (12.18%) / Dominion (40.08%) / PEPCO (14.05%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0457	Replace both wave traps on Dooks – Lexington 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  DEOK (0.06%) / Dominion (80.28%) / PEPCO (19.66%)</p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0467.2	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.66%) / BGE (22.09%) / ConEd (0.18%) / DPL (3.69%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.53%) / PEPCO (41.78%) / PPL (2.07%)
b0492.6	Replace Mount Storm 500 kV breaker 55072	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0492.7	Replace Mount Storm 500 kV breaker 55172	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.8	Replace Mount Storm 500 kV breaker H1172-2	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.9	Replace Mount Storm 500 kV breaker G2T550	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS  (9.22%) / BGE (4.41%) / DL  (0.02%) / DPL (6.88%) / Dominion  (10.77%) / ECP (0.44%) / JCPL  (11.59%) / ME (2.93%) /  NEPTUNE (1.11%) / PECO  (14.45%) / PEPCO (6.08%) / PPL  (6.36%) / PSEG (15.79%) / RE  (0.59%)</p>
b0492.10	Replace Mount Storm 500 kV breaker G2T554	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) / DPL  (2.53%) / Dominion (13.30%) /  EKPC (2.14%) / HTP*** (0.20%) /  JCPL (3.57%) / ME (1.72%) /  NEPTUNE* (0.41%) / PECO  (4.97%) / PENELEC (1.86%) /  PEPCO (3.85%) / PPL (4.95%) /  PSEG (5.89%) / RE (0.24%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS  (9.22%) / BGE (4.41%) / DL  (0.02%) / DPL (6.88%) / Dominion  (10.77%) / ECP (0.44%) / JCPL  (11.59%) / ME (2.93%) /  NEPTUNE (1.11%) / PECO  (14.45%) / PEPCO (6.08%) / PPL  (6.36%) / PSEG (15.79%) / RE  (0.59%)</p>

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.11	Replace Mount Storm 500 kV breaker G1T551	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.12	Upgrade nameplate rating of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.5	Advance n0716 (Ox - Replace 230kV breaker L242)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.6	Advance n0717 (Possum Point - Replace 230kV breaker SC192)	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0583	Install dual primary protection schemes on Gosport lines 62 and 51 at the remote terminals (Chesapeake on the 62 line and Reeves Ave on the 51 line)		Dominion (100%)
b0756	Install a second 500/115 kV autotransformer at Chancellor 500 kV		Dominion (100%)
b0756.1	Install two 500 kV breakers at Chancellor 500 kV		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (100%)
b0757	Reconductor one mile of Chesapeake – Reeves Avenue 115 kV line		Dominion (100%)
b0758	Install a second Fredericksburg 230/115 kV autotransformer		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0759	Build a second Doods – Dupont – Waynesboro 115 kV line		Dominion (100%)
b0760	Build 115 kV line from Kitty Hawk to Colington 115 kV (Colington on the existing line and Nag’s Head and Light House DP on new line)		Dominion (100%)
b0761	Install a second 230/115 kV transformer at Possum Point		Dominion (100%)
b0762	Build a new Elko station and transfer load from Turner and Providence Forge stations		Dominion (100%)
b0763	Rebuild 17.5 miles of the line for a new summer rating of 262 MVA		Dominion (100%)
b0764	Increase the rating on 2.56 miles of the line between Greenwich and Thompson Corner; new rating to be 257 MVA		Dominion (100%)
b0765	Add a second Bull Run 230/115 kV autotransformer		Dominion (100%)
b0766	Increase the rating of the line between Loudoun and Cedar Grove to at least 150 MVA		Dominion (100%)
b0767	Extend the line from Old Church – Chickahominy 230 kV		Dominion (100%)
b0768	Loop line #251 Idylwood – Arlington into the GIS sub		Dominion (100%)
b0769	Re-tension 15 miles of the line for a new summer rating of 216 MVA		Dominion (100%)
b0770	Add a second 230/115 kV autotransformer at Lanexa		Dominion (100%)
b0770.1	Replace Lanexa 115 kV breaker ‘8532’		Dominion (100%)
b0770.2	Replace Lanexa 115 kV breaker ‘9232’		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0771	Build a parallel Chickahominy – Lanexa 230 kV line		Dominion (100%)
b0772	Install a second Elmont 230/115 kV autotransformer		Dominion (100%)
b0772.1	Replace Elmont 115 kV breaker '7392'		Dominion (100%)
b0774	Install a 33 MVAR capacitor at Bremo 115 kV		Dominion (100%)
b0775	Reconductor the Greenwich – Virginia Beach line to bring it up to a summer rating of 261 MVA; Reconductor the Greenwich – Amphibious Base line to bring it up to 291 MVA		Dominion (100%)
b0776	Re-build Trowbridge – Winfall 115 kV		Dominion (100%)
b0777	Terminate the Thelma – Carolina 230 kV circuit into Lakeview 230 kV		Dominion (100%)
b0778	Install 29.7 MVAR capacitor at Lebanon 115 kV		Dominion (100%)
b0779	Build a new 230 kV line from Yorktown to Hayes but operate at 115 kV initially		Dominion (100%)
b0780	Reconductor Chesapeake – Yadkin 115 kV line		Dominion (100%)
b0781	Reconductor and replace terminal equipment on line 17 and replace the wave trap on line 88		Dominion (100%)
b0782	Install a new 115 kV capacitor at Dupont Waynesboro substation		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0784	Replace wave traps on North Anna to Ladysmith 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> Dominion (100%)
b0785	Rebuild the Chase City – Crewe 115 kV line	Dominion (100%)
b0786	Reconductor the Moran DP – Crewe 115 kV segment	Dominion (100%)
b0787	Upgrade the Chase City – Twitty’s Creek 115 kV segment	Dominion (100%)
b0788	Reconductor the line from Farmville – Pamplin 115 kV	Dominion (100%)
b0793	Close switch 145T183 to network the lines. Rebuild the section of the line #145 between Possum Point – Minnieville DP 115 kV	Dominion (100%)
b0815	Replace Elmont 230 kV breaker '22192'	Dominion (100%)
b0816	Replace Elmont 230 kV breaker '21692'	Dominion (100%)
b0817	Replace Elmont 230 kV breaker '200992'	Dominion (100%)
b0818	Replace Elmont 230 kV breaker '2009T2032'	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0837	At Mt. Storm, replace the existing MOD on the 500 kV side of the transformer with a circuit breaker	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> Dominion (100%)
b0888	Replace Loudoun 230 kV Cap breaker 'SC352'	Dominion (100%)
b0892	Replace Chesapeake 115 kV breaker SX522	Dominion (100%)
b0893	Replace Chesapeake 115 kV breaker T202	Dominion (100%)
b0894	Replace Possum Point 115 kV breaker SX-32	Dominion (100%)
b0895	Replace Possum Point 115 kV breaker L92-1	Dominion (100%)
b0896	Replace Possum Point 115 kV breaker L92-2	Dominion (100%)
b0897	Replace Suffolk 115 kV breaker T202	Dominion (100%)
b0898	Replace Peninsula 115 kV breaker SC202	Dominion (100%)
b0921	Reconductor Brambleton - Cochran Mill 230 kV line with 201 Yukon conductor	Dominion (100%)
b0923	Install 50-100 MVAR variable reactor banks at Carson 230 kV	Dominion (100%)
b0924	Install 50-100 MVAR variable reactor banks at Dooms 230 kV	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0925	Install 50-100 MVAR variable reactor banks at Garrisonville 230 kV		Dominion (100%)
b0926	Install 50-100 MVAR variable reactor banks at Hamilton 230 kV		Dominion (100%)
b0927	Install 50-100 MVAR variable reactor banks at Yadkin 230 kV		Dominion (100%)
b0928	Install 50-100 MVAR variable reactor banks at Carolina, Doods, Everetts, Idylwood, N. Alexandria, N. Anna, Suffolk and Valley 230 kV substations		Dominion (100%)
b1056	Build a 2nd Shawboro – Elizabeth City 230kV line		Dominion (100%)
b1058	Add a third 230/115 kV transformer at Suffolk substation		Dominion (100%)
b1058.1	Replace Suffolk 115 kV breaker ‘T122’ with a 40 kA breaker		Dominion (100%)
b1058.2	Convert Suffolk 115 kV straight bus to a ring bus for the three 230/115 kV transformers and three 115 kV lines		Dominion (100%)
b1071	Rebuild the existing 115 kV corridor between Landstown - Va Beach Substation for a double circuit arrangement (230 kV & 115 kV)		Dominion (100%)
b1076	Replace existing North Anna 500-230kV transformer with larger unit		Dominion (100%)
b1087	Replace Cannon Branch 230-115 kV with larger transformer		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1088	Build new Radnor Heights Sub, add new underground circuit from Ballston - Radnor Heights, Tap the Glebe - Davis line and create circuits from Davis - Radnor Heights and Glebe - Radnor Heights		Dominion (100%)
b1089	Install 2nd Burke to Sideburn 230 kV underground cable		Dominion (100%)
b1090	Install a 150 MVAR 230 kV capacitor and one 230 kV breaker at Northwest		Dominion (100%)
b1095	Reconductor Chase City 115 kV bus and add a new tie breaker		Dominion (100%)
b1096	Construct 10 mile double ckt. 230kV tower line from Loudoun to Middleburg		Dominion (100%)
b1102	Replace Brema 115 kV breaker '9122'		Dominion (100%)
b1103	Replace Brema 115 kV breaker '822'		Dominion (100%)
b1172	Build a 4-6 mile long 230 kV line from Hopewell to Bull Hill (Ft Lee) and install a 230-115 kV Tx		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1188	Build new Brambleton 500 kV three breaker ring bus connected to the Loudoun to Pleasant View 500 kV line	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)
b1188.1	Replace Loudoun 230 kV breaker '200852' with a 63 kA breaker	Dominion (100%)
b1188.2	Replace Loudoun 230 kV breaker '2008T2094' with a 63 kA breaker	Dominion (100%)
b1188.3	Replace Loudoun 230 kV breaker '204552' with a 63 kA breaker	Dominion (100%)
b1188.4	Replace Loudoun 230 kV breaker '209452' with a 63 kA breaker	Dominion (100%)
b1188.5	Replace Loudoun 230 kV breaker 'WT2045' with a 63 kA breaker	Dominion (100%)
b1188.6	Install one 500/230 kV transformer and two 230 kV breakers at Brambleton	AEC (0.22%) / BGE (7.90%) / DPL (0.59%) / Dominion (75.58%) / ME (0.22%) / PECO (0.73%) / PEPCO (14.76%)
b1224	Install 2nd Clover 500/230 kV transformer and a 150 MVar capacitor	BGE (7.56%) / DPL (1.03%) / Dominion (78.21%) / ME (0.77%) / PECO (1.39%) / PEPCO (11.04%)
b1225	Replace Yorktown 115 kV breaker 'L982-1'	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1226	Replace Yorktown 115 kV breaker 'L982-2'		Dominion (100%)
b1279	Line #69 Uprate – Increase rating on Locks – Purdy 115 kV to serve additional load at the Reams delivery point		Dominion (100%)
b1306	Reconfigure 115 kV bus at Endless Caverns substation such that the existing two 230/115 kV transformers at Endless Caverns operate in		Dominion (100%)
b1307	Install a 2nd 230/115 kV transformer at Northern Neck Substation		Dominion (100%)
b1308	Improve LSE's power factor factor in zone to .973 PF, adjust LTC's at Gordonsville and Remington, move existing shunt capacitor banks		Dominion (100%)
b1309	Install a 230 kV line from Lakeside to Northwest utilizing the idle line and 60 line ROW's and reconductor the existing 221 line between Elmont and Northwest		Dominion (100%)
b1310	Install a 115 kV breaker at Broadnax substation on the South Hill side of Broadnax		Dominion (100%)
b1311	Install a 230 kV 3000 amp breaker at Cranes Corner substation to sectionalize the 2104 line into two lines		Dominion (100%)
b1312	Loop the 2054 line in and out of Hollymeade and place a 230 kV breaker at Hollymeade. This creates two lines: Charlottesville - Hollymeade		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1313 Resag wire to 125C from Chesterfield – Shockoe and replace line switch 1799 with 1200 amp switch. The new rating would be 231 MVA.		Dominion (100%)
b1314 Rebuild the 6.8 mile line #100 from Chesterfield to Harrowgate 115 kV for a minimum 300 MBA rating		Dominion (100%)
b1315 Convert line #64 Trowbridge to Winfall to 230 kV and install a 230 kV capacitor bank at Winfall		Dominion (100%)
b1316 Rebuild 10.7 miles of 115 kV line #80, Battleboro – Heartsease DP		Dominion (100%)
b1317 LSE load power factor on the #47 line will need to meet MOA requirements of .973 in 2015 to further resolve this issue through at least 2019		Dominion (100%)
b1318 Install a 115 kV bus tie breaker at Acca substation between the Line #60 and Line #95 breakers		Dominion (100%)
b1319 Resag line #222 to 150 C and upgrade any associated equipment to a 2000A rating to achieve a 706 MVA summer line rating		Dominion (100%)
b1320 Install a 230 kV, 150 MVAR capacitor bank at Southwest substation		Dominion (100%)
b1321 Build a new 230 kV line North Anna – Oak Green and install a 224 MVA 230/115 kV transformer at Oak Green		BGE (0.85%) / Dominion (97.96%) / PEPCO (1.19%)
b1322 Rebuild the 39 Line (Dooms – Sherwood) and the 91 Line (Sherwood – Bremono)		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1323 Install a 224 MVA 230/115 kV transformer at Staunton. Rebuild the 115 kV line #43 section Staunton - Verona		Dominion (100%)
b1324 Install a 115 kV capacitor bank at Oak Ridge. Install a capacitor bank at New Bohemia. Upgrade 230/34.5 kV transformer #3 at Kings Fork		Dominion (100%)
b1325 Rebuild 15 miles of line #2020 Winfall – Elizabeth City with a minimum 900 MVA rating		Dominion (100%)
b1326 Install a third 168 MVA 230/115 kV transformer at Kitty Hawk with a normally open 230 kV breaker and a low side 115 kV breaker		Dominion (100%)
b1327 Rebuild the 20 mile section of line #22 between Kerr Dam – Eatons Ferry substations		Dominion (100%)
b1328 Uprate the 3.63 mile line section between Possum and Dumfries substations, replace the 1600 amp wave trap at Possum Point		AEC (0.66%) / APS (3.59%) / DPL (0.91%) / Dominion (92.94%) / PECO (1.90%)
b1329 Install line-tie breakers at Sterling Park substation and BECO substation		Dominion (100%)
b1330 Install a five breaker ring bus at the expanded Dulles substation to accommodate the existing Dulles Arrangement and support the Metrorail		Dominion (100%)
b1331 Build a 230 kV line from Shawboro to Aydlett tap and connect Aydlett to the new line		Dominion (100%)
b1332 Build Cannon Branch to Nokesville 230 kV line		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1333 Advance n1728 (Replace Possum Point 230 kV breaker H9T237 with an 80 kA breaker)		Dominion (100%)
b1334 Advance n1748 (Replace Ox 230 kV breaker 22042 with a 63 kA breaker)		Dominion (100%)
b1335 Advance n1749 (Replace Ox 230 kV breaker 220T2603 with a 63 kA breaker)		Dominion (100%)
b1336 Advance n1750 (Replace Ox 230 kV breaker 24842 with a 63 kA breaker)		Dominion (100%)
b1337 Advance n1751 (Replace Ox 230 kV breaker 248T2013 with a 63 kA breaker)		Dominion (100%)
b1503.1 Loop Line #2095 in and out of Waxpool approximately 1.5 miles		Dominion (100%)
b1503.2 Construct a new 230kV line from Brambleton to BECO Substation of approximately 11 miles with approximately 10 miles utilizing the vacant side of existing Line #2095 structures		Dominion (100%)
b1503.3 Install a one 230 kV breaker, Future 230 kV ring-bus at Waxpool Substation		Dominion (100%)
b1503.4 The new Brambleton - BECO line will feed Shellhorn Substation load and Greenway TX's #2&3 load		Dominion (100%)
b1506.1 At Gainesville Substation, create two 115 kV straight-buses with a normally open tie-breaker		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1506.2	Upgrade Line 124 (radial from Loudoun) to a minimum continuous rating of 500 MVA and network it into the 115 kV bus feeding NOVEC's DP at Gainesville	Dominion (100%)
b1506.3	Install two additional 230 kV breakers in the ring at Gainesville (may require substation expansion) to accommodate conversion of NOVEC's Gainesville to Wheeler line	Dominion (100%)
b1506.4	Convert NOVEC's Gainesville-Wheeler line from 115 kV to 230 kV (will require Gainesville DP Upgrade replacement of three transformers total at Atlantic and Wheeler Substations)	Dominion (100%)
b1507	Rebuild Mt Storm – Doubs 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (19.55%) / BGE (15.30%) / Dominion (48.38%) / PEPCO (16.77%)
b1508.1	Build a 2nd 230 kV Line Harrisonburg to Endless Caverns	APS (37.05%) / Dominion (62.95%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1508.2	Install a 3rd 230-115 kV Tx at Endless Caverns		APS (37.05%) / Dominion (62.95%)
b1508.3	Upgrade a 115 kV shunt capacitor banks at Merck and Edinburg		APS (37.05%) / Dominion (62.95%)
b1536	Advance n1752 (Replace OX 230 breaker 24342 with an (63kA breaker)		Dominion (100%)
b1537	Advance n1753 (Replace OX 230 breaker 243T2097 with an 63kA breaker)		Dominion (100%)
b1538	Replace Loudoun 230 kV breaker '29552'		Dominion (100%)
b1571	Replace Acca 115 kV breaker '6072' with 40 kA		Dominion (100%)
b1647	Upgrade the name plate rating at Morrisville 500kV breaker 'H1T573' with 50kA breaker		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (100%)
b1648	Upgrade name plate rating at Morrisville 500kV breaker 'H2T545' with 50kA breaker		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1649	Replace Morrisville 500kV breaker 'H1T580' with 50kA breaker	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1650	Replace Morrisville 500kV breaker 'H2T569' with 50kA breaker	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1651	Replace Loudoun 230kV breaker '295T2030' with 63kA breaker	Dominion (100%)
b1652	Replace Ox 230kV breaker '209742' with 63kA breaker	Dominion (100%)
b1653	Replace Clifton 230kV breaker '26582' with 63kA breaker	Dominion (100%)
b1654	Replace Clifton 230kV breaker '26682' with 63kA breaker	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1655	Replace Clifton 230kV breaker '205182' with 63kA breaker	Dominion (100%)
b1656	Replace Clifton 230kV breaker '265T266' with 63kA breaker	Dominion (100%)
b1657	Replace Clifton 230kV breaker '2051T2063' with 63kA breaker	Dominion (100%)
b1694	Rebuild Loudoun - Brambleton 500 kV Rebuild Loudoun - Brambleton 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (12.14%) / BGE (16.21%) / Dominion (54.33%) / PEPCO (17.32%)
b1696	Install a breaker and a half scheme with a minimum of eight 230 kV breakers for five existing lines at Idylwood 230 kV	AEC (0.46%) / APS (4.18%) / BGE (2.02%) / DPL (0.80%) / Dominion (88.45%) / JCPL (0.64%) / ME (0.50%) / NEPTUNE* (0.06%) / PECO (1.55%) / PEPCO (1.34%)
b1697	Build a 2nd Clark - Idylwood 230 kV line and install 230 kV gas-hybrid breakers at Clark	AEC (1.35%) / APS (15.65%) / BGE (10.53%) / DPL (2.59%) / Dominion (46.97%) / JCPL (2.36%) / ME (1.91%) / NEPTUNE* (0.23%) / PECO (4.48%) / PEPCO (11.23%) / PSEG (2.59%) / RE (0.11%)
b1698	Install a 2nd 500/230 kV transformer at Brambleton	APS (4.21%) / BGE (13.28%) / DPL (1.09%) / Dominion (59.38%) / PEPCO (22.04%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1698.1	Install a 500 kV breaker at Brambleton	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> Dominion (100%)
b1698.6	Replace Brambleton 230 kV breaker '2094T2095'	Dominion (100%)
b1699	Reconfigure Line #203 to feed Edwards Ferry sub radial from Pleasant View 230 kV and install new breaker bay at Pleasant View Sub	Dominion (100%)
b1700	Install a 230/115 kV transformer at the new Liberty substation to relieve Gainesville Transformer #3	Dominion (100%)
b1701	Reconductor line #2104 (Fredericksburg - Cranes Corner 230 kV)	APS (8.66%) / BGE (10.95%) / Dominion (63.30%) / PEPCO (17.09%)
b1724	Install a 2nd 138/115 kV transformer at Edinburg	Dominion (100%)
b1728	Replace the 115/34.5 kV transformer #1 at Hickory with a 230/34.5 kV transformer	Dominion (100%)

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**Virginia Electric and Power Company (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b1729	Add 4 breaker ring bus at Burton 115 kV substation and construct a 115 kV line approximately 3.5 miles from Oakwood 115 kV substation to Burton 115 kV substation		Dominion (100%)
b1730	Install a 230/115 kV transformer at a new Liberty substation		Dominion (100%)
b1731	Uprate or rebuild Four Rivers – Kings Dominion 115 kV line or Install capacitors or convert load from 115 kV system to 230 kV system		Dominion (100%)
b1790	Split Wharton 115 kV capacitor bank into two smaller units and add additional reactive support in area by correcting power factor at Pantego 115 kV DP and FivePoints 115 kV DP to minimum of 0.973		Dominion (100%)
b1791	Wreck and rebuild 2.1 mile section of Line #11 section between Gordonsville and Somerset		APS (5.83%) / BGE (6.25%) / Dominion (78.38%) / PEPCO (9.54%)
b1792	Rebuild line #33 Halifax to Chase City, 26 miles. Install 230 kV 4 breaker ring bus		Dominion (100%)
b1793	Wreck and rebuild remaining section of Line #22, 19.5 miles and replace two pole H frame construction built in 1930		Dominion (100%)
b1794	Split 230 kV Line #2056 (Hornertown - Rocky Mount) and double tap line to Battleboro Substation. Expand station, install a 230 kV 3 breaker ring bus and install a 230/115 kV transformer		Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1795	Reconductor segment of Line #54 (Carolina to Woodland 115 kV) to a minimum of 300 MVA		Dominion (100%)
b1796	Install 115 kV 25 MVAR capacitor bank at Kitty Hawk Substation		Dominion (100%)
b1797	Wreck and rebuild 7 miles of the Dominion owned section of Cloverdale - Lexington 500 kV		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEP (0.10%) / APS (30.84%) / ATSI (0.04%) / BGE (27.57%) / Dayton (0.01%) / DEOK (0.04%) / Dominion (0.11%) / EKPC (0.01%) / PEPCO (41.28%)
b1798	Build a 450 MVAR SVC and 300 MVAR switched shunt at Loudoun 500 kV		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> BGE (7.93%) / Dominion (76.09%) / PEPCO (15.98%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1799	Build 150 MVAR Switched Shunt at Pleasant View 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) /  DPL (2.53%) / Dominion  (13.30%) / EKPC (2.14%) /  HTP*** (0.20%) / JCPL (3.57%) /  ME (1.72%) / NEPTUNE*  (0.41%) / PECO (4.97%) /  PENELEC (1.86%) / PEPCO  (3.85%) / PPL (4.95%) / PSEG  (5.89%) / RE (0.24%) / ECP**  (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (2.14%) / DPL (0.36%) /  Dominion (96.45%) / ME (0.34%)  / PEPCO (0.71%)</p>
b1805	Install a 250 MVAR SVC at the existing Mt. Storm 500kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.57%) / AEP (15.18%) /  APS (5.89%) / ATSI (7.59%) /  BGE (4.12%) / ComEd (12.38%) /  ConEd (0.55%) / Dayton (2.02%) /  DEOK (3.15%) / DL (1.72%) /  DPL (2.53%) / Dominion  (13.30%) / EKPC (2.14%) /  HTP*** (0.20%) / JCPL (3.57%) /  ME (1.72%) / NEPTUNE*  (0.41%) / PECO (4.97%) /  PENELEC (1.86%) / PEPCO  (3.85%) / PPL (4.95%) / PSEG  (5.89%) / RE (0.24%) / ECP**  (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.47%) / BGE (19.13%) /  PEPCO (44.40%)</p>
b1809	Replace Brambleton 230 kV Breaker '22702'	Dominion (100%)
b1810	Replace Brambleton 230 kV Breaker '227T2094'	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1905.1	Surry to Skiffes Creek 500 kV Line (7 miles overhead)		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (100%)
b1905.2	Surry 500 kV Station Work		<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (100%)
b1905.3	Skiffes Creek 500-230 kV Tx and Switching Station		Dominion (99.84%) / PEPCO (0.16%)
b1905.4	New Skiffes Creek - Whealton 230 kV line		Dominion (99.84%) / PEPCO (0.16%)
b1905.5	Whealton 230 kV breakers		Dominion (99.84%) / PEPCO (0.16%)
b1905.6	Yorktown 230 kV work		Dominion (99.84%) / PEPCO (0.16%)
b1905.7	Lanexa 115 kV work		Dominion (99.84%) / PEPCO (0.16%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.8	Surry 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.9	Kings Mill, Peninmen, Toano, Waller, Warwick	Dominion (99.84%) / PEPCO (0.16%)
b1906.1	At Yadkin 500 kV, install six 500 kV breakers	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)
b1906.2	Install a 2nd 230/115 kV TX at Yadkin	Dominion (100%)
b1906.3	Install a 2nd 230/115 kV TX at Chesapeake	Dominion (100%)
b1906.4	Uprate Yadkin – Chesapeake 115 kV	Dominion (100%)
b1906.5	Install a third 500/230 kV TX at Yadkin	Dominion (100%)
b1907	Install a 3rd 500/230 kV TX at Clover	APS (5.83%) / BGE (4.74%) / Dominion (81.79%) / PEPCO (7.64%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1908	Rebuild Lexington – Dooms 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.57%) / AEP (15.18%) / APS (5.89%) / ATSI (7.59%) / BGE (4.12%) / ComEd (12.38%) / ConEd (0.55%) / Dayton (2.02%) / DEOK (3.15%) / DL (1.72%) / DPL (2.53%) / Dominion (13.30%) / EKPC (2.14%) / HTP*** (0.20%) / JCPL (3.57%) / ME (1.72%) / NEPTUNE* (0.41%) / PECO (4.97%) / PENELEC (1.86%) / PEPCO (3.85%) / PPL (4.95%) / PSEG (5.89%) / RE (0.24%) / ECP** (0.20%) <b>DFAX Allocation:</b> DEOK (0.06%) / Dominion (80.28%) / PEPCO (19.66%)
b1909	Uprate Brems – Midlothian 230 kV to its maximum operating temperature	APS (6.31%) / BGE (3.81%) / Dominion (81.90%) / PEPCO (7.98%)
b1910	Build a Suffolk – Yadkin 230 kV line (14 miles) and install 4 breakers	Dominion (100%)
b1911	Add a second Valley 500/230 kV TX	APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)
b1912	Install a 500 MVAR SVC at Landstown 230 kV	DEOK (0.46%) / Dominion (99.54%)
b2053	Rebuild 28 mile line	AEP (100%)
b2125	Install four additional 230 kV 100 MVAR variable shunt reactor banks at Clifton, Gallows Road, Garrisonville, and Virginia Hills substations	Dominion (100%)
b2126	Install two additional 230 kV 100 MVAR variable shunt reactor banks at Churchland and Shawboro substations	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2181	Add a motor to an existing switch at Prince George to allow for Sectionalizing scheme for line #2124 and allow for Brickhouse DP to be re-energized from the 115 kV source		Dominion (100%)
b2182	Install 230kV 4-breaker ring at Enterprise 230 kV to isolate load from transmission system when substation initially built		Dominion (100%)
b2183	Add a motor to an existing switch at Keene Mill to allow for a sectionalizing scheme		Dominion (100%)
b2184	Install a 230 kV breaker at Tarboro to split line #229. Each will feed an autotransformer at Tarboro. Install switches on each autotransformer		Dominion (100%)
b2185	Uprate Line #69 segment Reams DP to Purdy (19 miles) from 41 MVA to 162 MVA by replacing 5 structures and re-sagging the line from 50C to 75C		Dominion (100%)
b2186	Install a 2nd 230-115kV transformer at Earleys connected to the existing 115kV and 230kV ring busses. Add a 115 kV breaker and 230kV breaker to the ring busses		Dominion (100%)
b2187	Install 4 - 230kV breakers at Shellhorn 230 kV to isolate load		Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.



## **SCHEDULE 12-C**

### **Assignment of Cost Responsibility for Covered Transmission Enhancements**

**1. Applicability:** This Schedule 12-C shall apply to the assignment of cost responsibility with respect to the Required Transmission Enhancements listed on Schedule 12-C Appendix A, as of January 1, 2016. Each such Required Transmission Enhancement, including any Necessary Lower Voltage Facilities associated therewith, is hereafter referred to as a “Covered Transmission Enhancement.”

**2. Effective Date of Rates and Charges under this Schedule 12-C:** This Schedule 12-C shall apply to the assignment of cost responsibility with respect to the Covered Transmission Enhancements from and after January 1, 2016. The assignment of cost responsibility for Covered Transmission Enhancements through December 31, 2015 shall continue to be governed by Schedule 12 - Appendix.

**3. Implementation Calculations:** PJM shall track and accumulate the differences between amounts collected from Responsible Customers with respect to the Covered Transmission Enhancements and the rates and charges applicable under this Schedule 12-C between January 1, 2016 and the date of a FERC order in Docket No. EL05-121-009 authorizing PJM to begin collecting the rates specified in this Schedule 12-C (the “Implementation Date”). To reflect those differences and implement the rates and charges applicable under this Schedule 12-C as of January 1, 2016, PJM shall issue to Responsible Customers monthly credits or charges equal to (a) the aggregate of such differences between January 1, 2016 and the Implementation Date, including interest calculated from January 1, 2016 in accordance with 18 C.F.R. § 35.19a, divided by (b) the fewer of (i) 12 or (ii) the number of months between January 1, 2016 and the Implementation Date, rounded to the nearest whole number. Each monthly credit or charge shall also include interest from the Implementation Date calculated in accordance with 18 C.F.R. § 35.19a to the date such credit or charge is issued.

**4. Cost Responsibility for Covered Transmission Enhancements After January 1, 2016:**

- a. Transmission Provider shall collect, with respect to each Covered Transmission Enhancement from Responsible Customers, as defined in Schedule 12, as two separate line items on their bills: (i) Current Recovery Charges, calculated as set forth in subsection 4.b of this Schedule 12-C; and (ii) Transmission Enhancement Charge Adjustments, calculated as set forth in subsection 4.c of this Schedule 12-C.
- b. The Current Recovery Charges for each Covered Transmission Enhancement shall assign responsibility to pay the Transmission Enhancement Charges established pursuant to Schedule 12 with respect to that Covered Transmission Enhancement to Responsible Customers as follows:

- i. Fifty percent (50%) shall be assigned annually to Zones and Merchant Transmission Facilities on a load-ratio share basis, as set forth in section (b)(i)(A)(1) of Schedule 12; and
- ii. Fifty percent (50%) shall be assigned annually to Zones and Merchant Transmission Facilities as follows:
  - (1) In the case of any Covered Transmission Enhancement that is not identified on Schedule 12-C Appendix A as a project that was canceled or abandoned before entering service (hereafter referred to as a “Canceled Project”), in accordance with subsection (b)(i)(A)(2)(a) of Schedule 12; or
  - (2) In the case of any Covered Transmission Enhancement that is identified on Schedule 12-C Appendix A as a Canceled Project, in accordance with the cost responsibility assignments set forth in Schedule 12-C Appendix B.

The Current Recovery Charges shall be adjusted, as necessary, if the Commission modifies the charges that the owner(s) of a Covered Transmission Enhancement are authorized to recover, including but not limited to, the charges for a Canceled Project, so that the Current Recovery Charges with respect to each Covered Transmission Enhancement reflect only the amounts the Commission authorizes the owner(s) to recover from and after January 1, 2016, including any return on investment or carrying charges the Commission authorizes.

- c. During each month during the period beginning on the January 1, 2016 and continuing through December 31, 2025, the Transmission Enhancement Charge Adjustment determined under this subsection 4.c. shall be applied to Responsible Customers in addition to the Current Recovery Charge. The Transmission Enhancement Charge Adjustment shall be the charge or credit specified in Schedule 12-C, Appendix C with respect to the month for the Zone or Merchant Transmission Facility applicable to the Responsible Customer, subject to adjustment in accordance with subsection 4.c.(i).
- i. The Transmission Enhancement Charge Adjustments shall be subject to adjustment only in the circumstances described in paragraph (1) or (2) of this subsection 4.c.(i).
  - (1) If the Commission determines in a final order in Docket No. ER12-2708-003 that is no longer subject to judicial review that all or a portion of the costs incurred by the owners of the Potomac Appalachian Transmission Highline (“PATH”) Project through charges under Schedule 12 are or were not properly recoverable, then the Transmission Enhancement Charge Adjustment set forth in Schedule 12-C, Appendix C shall be adjusted as follows. PJM shall calculate the necessary adjustments to the Transmission Enhancement Charge Adjustments over the remainder of the period during which Transmission Enhancement Charge Adjustments are

collected so that the amounts recovered by Transmission Enhancement Charge Adjustments with respect to the PATH Project, as shown on Schedule 12-C ,Appendix C, reflect only the amounts the Commission authorizes the owner(s) to recover prior to January 1, 2016, including any return on investment or carrying charges authorized in such Commission final order. If a Commission determination in such a final order is subsequently modified on rehearing, judicial review, or remand, the Transmission Enhancement Charge Adjustments shall be adjusted to give effect to such ruling.

- (2) If all Responsible Customers in a Zone or Merchant Transmission Facility are no longer subject to Transmission Enhancement Charges under the PJM Tariff during the period in which Transmission Enhancement Charge Adjustments are collected, then, during the portion of that period that such Responsible Customers are not subject to Transmission Enhancement Charges, the payments from or credits to such Responsible Customers shall cease and PJM shall adjust the Transmission Enhancement Charge Adjustments payable by and credited to other remaining Responsible Customers on a pro rata basis, as follows. If such Responsible Customers were entitled to a credit, then the credit associated with such Responsible Customers shall be allocated pro rata among all Zones and Merchant Transmission Facilities in which Responsible Customers remain subject to Transmission Enhancement Charges and are entitled to credits. If such Responsible Customers were required to make payments, then the payment obligation associated with such Responsible Customers shall be allocated pro rata among all remaining Zones and Merchant Transmission Facilities in which Responsible Customers remain subject to Transmission Enhancement Charges and have payment obligations. If Responsible Customers in a Zone or Merchant Transmission Facility comprising substantially the same transmission assets as a Zone or Merchant Transmission Facility identified on Schedule 12-C Appendix C, again become subject to Transmission Enhancement Charges during the period that Transmission Enhancement Charge Adjustments are collected, the payments from or credits to such customers shall resume and the adjustments to payments from or credits to other Responsible Customers in accordance with this subsection shall cease.
- (3) If Consolidated Edison Company of New York, Inc. ("Con Edison") terminates its transmission service agreements with PJM (PJM Original Service Agreements 1873 and 1874) during the period in which Transmission Enhancement Charge Adjustments are collected, then, provided Con Edison remains a party to the PJM Operating Agreement, payments from or credits to Con Edison as Transmission Enhancement Charge Adjustments, as determined in accordance with this Schedule 12-C, shall continue for the remainder of that period.

**5. Recovery of Current Recovery Charges and Transmission Enhancement Charge Adjustments:**

- a. Responsible Customers shall pay Transmission Provider all applicable Current Recovery Charges and Transmission Enhancement Charge Adjustments as required by this Schedule 12-C in addition to all other charges for transmission service for which such Responsible Customers are responsible under the Tariff.
- b. Transmission Provider shall collect all applicable Current Recovery Charges and Transmission Enhancement Charge Adjustments from each Responsible Customer on a monthly basis. Transmission Provider shall remit or credit all revenues received from Responsible Customers under this Schedule 12-C to the Transmission Owner(s) that established Transmission Enhancement Charges with respect to Covered Transmission Enhancements.

**6. Crediting of Revenues from Current Recovery Charges:** Current Recovery Charges for a billing month with respect to a Transmission Owner's Covered Transmission Enhancement(s) shall be subject to revenue crediting in accordance with Section (e) of Schedule 12.

## SCHEDULE 12-C APPENDIX A

### List of Covered Transmission Enhancements

<u>Project Name or Description</u>	<u>Project ID(s)</u>
TrAILCo	b0328.2, b0347.1, b0347.10, b0347.11, b0347.12, b0347.13, b0347.14, b0347.15, b0347.16, b0347.17, b0347.18, b0347.19, b0347.2, b0347.20, b0347.21, b0347.22, b0347.23, b0347.24, b0347.25, b0347.26, b0347.27, b0347.28, b0347.29, b0347.3, b0347.30, b0347.31, b0347.32, b0347.4, b0347.5, b0347.6, b0347.7, b0347.8, b0347.9, b1804
Black Oak SVC	b0216
PATH (Canceled Project)	b0490, b0490.2, b0490.3, b0490.4, b0490.5, b0490.6, b0490.7, b0490.8, b0490.9, b0491, b0492, b0492.10, b0492.11, b0492.12, b0492.6, b0492.7, b0492.8, b0492.9, b0560
Carson-Suffolk	b0231, b0329
Mt. Storm-Doubs	b0217, b1507
Meadowbrook-Loudon	b0328.1, b0328.3, b0328.4
Susquehanna-Roseland	b0487, b0489, b0489.10, b0489.11, b0489.12, b0489.13, b0489.14, b0489.15, b0489.5, b0489.6, b0489.7, b0489.8, b0489.9
MAPP (Canceled Project)	b0512, b0512.10, b0512.11, b0512.12, b0512.13, b0512.14, b0512.15, b0512.16, b0512.17, b0512.18, b0512.19, b0512.20, b0512.21, b0512.22, b0512.23, b0512.24, b0512.25, b0512.26, b0512.27, b0512.28, b0512.29, b0512.5, b0512.6, b0512.7, b0512.8, b0512.9
Branchburg Wave Trap	b0172.2
Branchburg Capacitor	b0290
Kammer Transformer	b0495
Loop Into New Freedom	b0498
Meadow Brook Capacitor	b0559
BRH Project (Canceled Project)	b0829, b0830, b0832, b0833
Rockport Reactor	b1465.2
Dumont-Marysville	b1659.14
Cloverdale-Lexington	b1797
Loudon SVC	b1798
Pleasant View Capacitor	b1799
Hunterstown SVC	b1800
Doubs Capacitor	b1803
Mt Storm SVC	b1805
Lexington-Dooms	b1908
Conemaugh Capacitor	b0376

Dominion EHV Projects	b0222, b0457, b0756.1, b0784, b0837, b1188, b1647, b1648, b1649, b1650, b1698.1, b1905.2, b1906.1, b1694, b0412, b1905.1
PSEG EHV Projects	b1410, b1411, b1412, b1413, b1414, b1415, b0829.6
PPL EHV Projects	b0171.2, b0172.1, b2006.1, b0284.2
AEP East EHV Projects	b0504, b1465.3, b1465.4, b1659.13, b1660, b1661, b1962, b1663.2
AECO EHV Projects	b0210
Delmarva EHV Projects	b0272.1, b0751
PECO EHV Projects	b0171.1, b0269, b0269.6, b0287
Allegheny EHV Projects	b0393, b0419, b0577, b1507.2, b1507.3
Penelec EHV Projects	b0549

## SCHEDULE 12-C APPENDIX B

### Allocations for Canceled Projects

	<u>PATH</u>	<u>MAPP</u>
AEC	4.99%	3.94%
AEP	4.37%	0.00%
APS	9.22%	0.33%
ATSI	0.00%	0.00%
BGE	4.41%	34.52%
ComEd	0.00%	0.00%
Coned	0.00%	0.00%
Dayton	0.00%	0.00%
DEOK	0.00%	0.00%
DL	0.02%	0.00%
DPL	6.88%	14.68%
Dominion	10.77%	0.30%
EKPC	0.00%	0.00%
HTP	0.00%	0.00%
JCPL	11.59%	9.43%
ME	2.93%	2.16%
Neptune	1.11%	0.90%
PECO	14.45%	10.51%
PENELEC	0.00%	0.00%
PEPCO	6.08%	2.44%
PPL	6.36%	5.50%
PSEG	15.79%	14.37%
RE	0.59%	0.54%
UGI	0.00%	0.00%
ECP	0.44%	0.38%
TOTAL	100.00%	100.00%

Note: The above percentages apply to 50% of the responsibility to pay the Transmission Enhancement Charges for the identified Canceled Projects in accordance with section 3.b.ii.(2) of Schedule 12-C.

## SCHEDULE 12-C APPENDIX C

### TRANSMISSION ENHANCEMENT CHARGE ADJUSTMENTS

(Effective January 1, 2016)

<b>Zone or MTF</b>	<b>TEC Adjustment Years 1-4 Without PATH</b>	<b>TEC Adjustment Years 1-4 PATH Only</b>	<b>Total TEC Adjustment Years 1 through 4</b>	<b>TEC Adjustment Years 5-10 Without PATH</b>	<b>TEC Adjustment Years 5-10 PATH Only</b>	<b>Total TEC Adjustment Years 5 through 10</b>
<b>AE</b>	-\$24,860.09	\$47,899.66	\$23,039.57	-\$10,418.79	\$20,074.61	\$9,655.82
<b>AEP</b>	-\$2,444,812.18	-\$174,489.11	-\$2,619,301.30	-\$1,024,614.00	-\$73,127.90	-\$1,097,741.90
<b>APS</b>	\$954,922.88	\$52,440.01	\$1,007,362.89	\$400,205.53	\$21,977.46	\$422,182.99
<b>ATSI</b>	-\$1,093,902.38	-\$72,438.56	-\$1,166,340.94	-\$458,451.45	-\$30,358.80	-\$488,810.25
<b>BGE</b>	\$1,281,971.91	-\$2,640.98	\$1,279,330.93	\$537,270.87	-\$1,106.83	\$536,164.04
<b>ComEd</b>	-\$2,608,103.66	-\$221,693.57	-\$2,829,797.23	-\$1,093,049.01	-\$92,911.16	-\$1,185,960.17
<b>ConEd</b>	-\$70,904.37	-\$4,688.81	-\$75,593.18	-\$29,715.83	-\$1,965.07	-\$31,680.89
<b>Dayton</b>	-\$375,384.08	-\$34,767.87	-\$410,151.95	-\$157,322.42	-\$14,571.12	-\$171,893.54
<b>Duke OH/KY</b>	-\$302,715.79	-\$20,247.63	-\$322,963.42	-\$126,867.35	-\$8,485.73	-\$135,353.07
<b>Duquesne</b>	-\$318,588.72	-\$28,822.02	-\$347,410.74	-\$133,519.65	-\$12,079.23	-\$145,598.88
<b>Delmarva DE</b>	-\$157,754.97	\$37,622.55	-\$120,132.43	-\$66,114.67	\$15,767.50	-\$50,347.17
<b>Delmarva MD</b>	-\$97,639.85	\$22,956.13	-\$74,683.72	-\$40,920.59	\$9,620.85	-\$31,299.74
<b>Delmarva VA</b>	-\$13,369.07	\$3,188.35	-\$10,180.71	-\$5,602.94	\$1,336.23	-\$4,266.71
<b>Dominion</b>	\$2,548,417.01	-\$29,708.12	\$2,518,708.88	\$1,068,034.50	-\$12,450.59	\$1,055,583.90
<b>EKPC</b>	-\$88,156.35	-\$3,920.00	-\$92,076.35	-\$36,946.08	-\$1,642.86	-\$38,588.94
<b>HTP</b>	\$67,459.71	-\$392.30	\$67,067.41	\$28,272.18	-\$164.41	\$28,107.76
<b>JCPL</b>	\$684,836.11	\$113,570.16	\$798,406.27	\$287,012.91	\$47,596.94	\$334,609.85
<b>MedEd</b>	-\$290,626.73	\$14,498.19	-\$276,128.54	-\$121,800.86	\$6,076.15	-\$115,724.70
<b>Neptune</b>	\$63,553.63	\$10,067.97	\$73,621.60	\$26,635.15	\$4,219.46	\$30,854.61
<b>PECO</b>	-\$766,990.16	\$132,927.71	-\$634,062.44	-\$321,443.45	\$55,709.64	-\$265,733.81
<b>Penelec</b>	-\$224,425.28	-\$30,009.25	-\$254,434.53	-\$94,056.01	-\$12,576.79	-\$106,632.80
<b>PEPCO DC</b>	\$787,856.55	\$9,072.91	\$796,929.46	\$330,188.49	\$3,802.43	\$333,990.92
<b>PEPCO MD</b>	\$1,145,526.02	\$13,215.00	\$1,158,741.03	\$480,086.78	\$5,538.37	\$485,625.15
<b>PEPCO SMECO</b>	\$273,479.45	\$3,154.91	\$276,634.36	\$114,614.48	\$1,322.21	\$115,936.69
<b>PPL EU</b>	-\$786,877.08	\$20,174.85	-\$766,702.23	-\$329,778.00	\$8,455.23	-\$321,322.78
<b>PPL UGI</b>	-\$40.31	\$0.00	-\$40.31	-\$16.89	\$0.00	-\$16.89
<b>PSEG</b>	\$1,713,725.35	\$135,477.48	\$1,849,202.83	\$718,217.54	\$56,778.24	\$774,995.77
<b>Rockland</b>	\$63,940.65	\$4,698.27	\$68,638.92	\$26,797.35	\$1,969.03	\$28,766.38
<b>East Coast Power</b>	\$79,461.78	\$2,854.08	\$82,315.86	\$33,302.21	\$1,196.14	\$34,498.35



Schedule 12 – Appendix  
Versions effective January 1, 2017 - 2017 Annual Update  
(Clean Format)

## SCHEDULE 12 – APPENDIX

### (1) Atlantic City Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0135	Build new Cumberland – Dennis 230 kV circuit which replaces existing Cumberland – Corson 138 kV	AEC (100%)
b0136	Install Dennis 230/138 kV transformer, Dennis 150 MVAR SVC and 50 MVAR capacitor	AEC (100%)
b0137	Build new Dennis – Corson 138 kV circuit	AEC (100%)
b0138	Install Cardiff 230/138 kV transformer and a 50 MVAR capacitor at Cardiff	AEC (100%)
b0139	Build new Cardiff – Lewis 138 kV circuit	AEC (100%)
b0140	Reconductor Laurel – Woodstown 69 kV	AEC (100%)
b0141	Reconductor Monroe – North Central 69 kV	AEC (100%)
b0265	Upgrade AE portion of Delco Tap – Mickleton 230 kV circuit	AEC (88.94%) / ConEd (1.04%) / JCPL (9.38%) / Neptune* (0.64%)
b0276	Replace both Monroe 230/69 kV transformers	AEC (91.28%) / PSEG (8.29%) / RE (0.23%) / ECP** (0.20%)
b0276.1	Upgrade a strand bus at Monroe to increase the rating of transformer #2	AEC (100%)
b0277	Install a second Cumberland 230/138 kV transformer	AEC (100%)
b0281.1	Install 35 MVAR capacitor at Lake Ave 69 kV substation	AEC (100%)

## Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0281.2	Install 15 MVAR capacitor at Shipbottom 69 kV substation	AEC (100%)
b0281.3	Install 8 MVAR capacitors on the AE distribution system	AEC (100%)
b0142	Reconductor Landis – Minotola 138 kV	AEC (100%)
b0143	Reconductor Beckett – Paulsboro 69 kV	AEC (100%)
b0210	Install a new 500/230kV substation in AEC area. The high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (100%)
b0210	Install a new 500/230kV substation in AEC area, the high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)††

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

### Atlantic City Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0211	Reconductor Union - Corson 138kV circuit		AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)
b0212	Substation upgrades at Union and Corson 138kV		AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)
b0214	Install 50 MVAR capacitor at Cardiff 230kV substation		AEC (100%)
b0431	Monroe Upgrade New Freedom strand bus		AEC (100%)
b0576	Move the Monroe 230/69 kV to Mickleton		AEC (100%)
b0744	Upgrade a strand bus at Mill 138 kV		AEC (100%)
b0871	Install 35 MVAR capacitor at Motts Farm 69 kV		AEC (100%)
b1072	Modify the existing EMS load shedding scheme at Cedar to additionally sense the loss of both Cedar 230/69 kV transformers and shed load accordingly		AEC (100%)
b1127	Build a new Lincoln-Minitola 138 kV line		AEC (100%)
b1195.1	Upgrade the Corson sub T2 terminal		AEC (100%)
b1195.2	Upgrade the Corson sub T1 terminal		AEC (100%)
b1244	Install 10 MVAR capacitor at Peermont 69 kV substation		AEC (100%)

### Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1245	Rebuild the Newport-South Millville 69 kV line	AEC (100%)
b1250	Reconductor the Monroe – Glassboro 69 kV	AEC (100%)
b1250.1	Upgrade substation equipment at Glassboro	AEC (100%)
b1280	Sherman: Upgrade 138/69 kV transformers	AEC (100%)
b1396	Replace Lewis 138 kV breaker ‘L’	AEC (100%)
b1398.5	Reconductor the existing Mickleton – Goucestr 230 kV circuit (AE portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1598	Reconductor Sherman Av – Carl’s Corner 69kV circuit	AEC (100%)
b1599	Replace terminal equipments at Central North 69 kV substation	AEC (100%)
b1600	Upgrade the Mill T2 138/69 kV transformer	AEC (88.83%) / JCPL (4.74%) / HTP (0.20%) / ECP** (0.22%) / PSEG (5.78%) / RE (0.23%)
b2157	Re-build 5.3 miles of the Corson - Tuckahoe 69 kV circuit	AEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

## SCHEDULE 12 – APPENDIX

### (3) Delmarva Power & Light Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0144.1	Build new Red Lion – Milford – Indian River 230 kV circuit	DPL (100%)
b0144.2	Indian River Sub – 230 kV Terminal Position	DPL (100%)
b0144.3	Red Lion Sub – 230 kV Terminal Position	DPL (100%)
b0144.4	Milford Sub – (2) 230 kV Terminal Positions	DPL (100%)
b0144.5	Indian River – 138 kV Transmission Line to AT-20	DPL (100%)
b0144.6	Indian River – 138 & 69 kV Transmission Ckts. Undergrounding	DPL (100%)
b0144.7	Indian River – (2) 230 kV bus ties	DPL (100%)
b0148	Re-rate Glasgow – Mt. Pleasant 138 kV and North Seaford – South Harrington 138 kV	DPL (100%)
b0149	Complete structure work to increase rating of Cheswold – Jones REA 138 kV	DPL (100%)
b0221	Replace disconnect switch on Edgewood-N. Salisbury 69 kV	DPL (100%)
b0241.1	Keeny Sub – Replace overstressed breakers	DPL (100%)
b0241.2	Edgemoor Sub – Replace overstressed breakers	DPL (100%)
b0241.3	Red Lion Sub – Substation reconfigure to provide for second Red Lion 500/230 kV transformer	DPL (84.5%) / PECO (15.5%)
b0261	Replace 1200 Amp disconnect switch on the Red Lion – Reybold 138 kV circuit	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0262	Reconductor 0.5 miles of Christiana – Edgemoor 138 kV	DPL (100%)
b0263	Replace 1200 Amp wavetrap at Indian River on the Indian River – Frankford 138 kV line	DPL (100%)
b0272.1	Replace line trap and disconnect switch at Keeney 500 kV substation – 5025 Line Terminal Upgrade	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (21.12%) / BGE (1.94%) / DPL (38.69%) / ECP (0.11%) / HTP (0.15%) / JCPL (7.65%) / NEPTUNE (0.99%) / PECO (26.10%) / PEPCO (1.83%) / PPL (1.42%)</p>
b0282	Install 46 MVAR capacitors on the DPL distribution system	DPL (100%)
b0291	Replace 1600A disconnect switch at Harmony 230 kV and for the Harmony – Edgemoor 230 kV circuit, increase the operating temperature of the conductor	DPL (100%)
b0295	Raise conductor temperature of North Seaford – Pine Street – Dupont Seaford	DPL (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, LLC

\*\*\*Hudson Transmission Partners, LLC

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0296	Rehoboth/Cedar Neck Tap (6733-2) upgrade		DPL (100%)
b0320	Create a new 230 kV station that splits the 2 <sup>nd</sup> Milford to Indian River 230 kV line, add a 230/69 kV transformer, and run a new 69 kV line down to Harbeson 69 kV		DPL (100%)
b0382	Cambridge Sub – Close through to Todd Substation		DPL (100%)
b0383	Wye Mills AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0384	Replace Indian River AT-20 (400 MVA)		DPL (100%)
b0385	Oak Hall to New Church (13765) Upgrade		DPL (100%)
b0386	Cheswold/Kent (6768) Rebuild		DPL (100%)
b0387	N. Seaford – Add a 2 <sup>nd</sup> 138/69 kV autotransformer		DPL (100%)
b0388	Hallwood/Parksley (6790-2) Upgrade		DPL (100%)
b0389	Indian River AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0390	Rehoboth/Lewes (6751-1 and 6751-2) Upgrade		DPL (100%)
b0391	Kent/New Meredith (6704-2) Upgrade		DPL (100%)
b0392	East New Market Sub – Establish a 69 kV Bus Arrangement		DPL (100%)
b0415	Increase the temperature ratings of the Edgemoor – Christiana – New Castle 138 kV by replacing six transmission poles		DPL (100%)



### Delmarva Power & Light Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0437	Spare Keeney 500/230 kV transformer		DPL (100%)
b0441	Additional spare Keeney 500/230 kV transformer		DPL (100%)
b0480	Rebuild Lank – Five Points 69 kV		DPL (100%)
b0481	Replace wave trap at Indian River 138 kV on the Omar – Indian River 138 kV circuit		DPL (100%)
b0482	Rebuild Millsboro – Zoar REA 69 kV		DPL (100%)
b0483	Replace Church 138/69 kV transformer and add two breakers		DPL (100%)
b0483.1	Build Oak Hall – Wattsville 138 kV line		DPL (100%)
b0483.2	Add 138/69 kV transformer at Wattsville		DPL (100%)
b0483.3	Establish 138 kV bus position at Oak Hall		DPL (100%)
b0484	Re-tension Worcester – Berlin 69 kV for 125°C		DPL (100%)
b0485	Re-tension Taylor – North Seaford 69 kV for 125°C		DPL (100%)
b0494.1	Install a 2 <sup>nd</sup> Red Lion 230/138 kV		DPL (100%)
b0494.2	Hares Corner – Relay Improvement		DPL (100%)
b0494.3	Reybold – Relay Improvement		DPL (100%)
b0494.4	New Castle – Relay Improvement		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0513	Rebuild the Ocean Bay – Maridel 69 kV line	DPL (100%)
b0527	Replace existing 12 MVAR capacitor at Bethany with a 30 MVAR capacitor	DPL (100%)
b0528	Replace existing 69/12 kV transformer at Bethany with a 138/12 kV transformer	DPL (100%)
b0529	Install an additional 8.4 MVAR capacitor at Grasonville 69 Kv	DPL (100%)
b0530	Replace existing 12 MVAR capacitor at Wye Mills with a 30 MVAR capacitor	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0531	Create a four breaker 138 kV ring bus at Wye Mills and add a second 138/69 kV transformer	DPL (100%)
b0566	Rebuild the Trappe Tap – Todd 69 kV line	DPL (100%)
b0567	Rebuild the Mt. Pleasant – Townsend 138 kV line	DPL (100%)
b0568	Install a third Indian River 230/138 kV transformer	DPL (100%)
b0725	Add a third Steele 230/138 kV transformer	DPL (100%)
b0732	Rebuild Vaugh – Wells 69 kV	DPL (100%)
b0733	Add a second 230/138 kV transformer at Harmony	DPL (97.06%) / PECO (2.94%)
b0734	Rebuild Church – Steele 138 kV	DPL (100%)
b0735	Rebuild Indian River – Omar – Bethany 138 kV	DPL (100%)
b0736	Rebuild Dupont Edgemoor – Edgemoor – Silverside 69 kV	DPL (69.46%) / PECO (17.25%) / ECP** (0.27%) / PSEG (12.53%) / RE (0.49%)
b0737	Build a new Indian River – Bishop 138 kV line	DPL (100%)
b0750	Convert 138 kV network path from Vienna – Loretto – Piney - Grove to 230 kV, add 230/138 kV transformer to Loretto 230 kV	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0751	Add two additional breakers at Keeney 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  DPL (100%)</p>
b0752	Replace two circuit breakers to bring the emergency rating up to 348 MVA	DPL (100%)
b0753	Add a second Loretto 230/138 kV transformer	DPL (100%)
b0754	Rebuild 10 miles of Glasgow to Mt. Pleasant 138 kV line to bring the normal rating to 298 MVA and the emergency rating to 333 MVA	DPL (100%)
b0792	Reconfigure Cecil Sub into 230 and 138 kV ring buses, add a 230/138 kV transformer, and operate the 34.5 kV bus normally open	DPL (100%)
b0873	Build 2nd Glasgow-Mt Pleasant 138 kV line	DPL (100%)
b0874	Reconfigure Brandywine substation	DPL (100%)

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## Delmarva Power & Light Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0876	Install 50 MVAR SVC at 138th St 138 kV		DPL (100%)
b0877	Build a 2nd Vienna-Steele 230 kV line		DPL (100%)
b0879.1	Apply a special protection scheme (load drop at Stevensville and Grasonville)		DPL (100%)
b1246	Re-build the Townsend – Church 138 kV circuit		DPL (100%)
b1247	Re-build the Glasgow – Cecil 138 kV circuit		DPL (72.06%) / PECO (27.94%)
b1248	Install two 15 MVAR capacitor at Loretto 69 kV		DPL (100%)
b1249	Reconfigure the existing Sussex 69 kV capacitor		DPL (100%)
b1603	Upgrade 19 miles conductor of the Wattsville - Signepost - Stockton - Kenney 69 kV circuit		DPL (100%)
b1604	Replace CT at Reybold 138 kV substation		DPL (100%)
b1723	Replace strand bus and disconnect switch at Glasgow 138 kV substation		DPL (100%)
b1899.1	Install new variable reactors at Indian River and Nelson 138 kV		DPL (100%)

\* Neptune Regional Transmission System, LLC

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The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-3.

**Delmarva Power & Light Company (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1899.2	Install new variable reactors at Cedar Creek 230 kV		DPL (100%)
b1899.3	Install new variable reactors at New Castle 138 kV and Easton 69 kV		DPL (100%)

## SCHEDULE 12 – APPENDIX

### (5) Metropolitan Edison Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0215	Install 230Kv series reactor and 2- 100MVAR PLC switched capacitors at Hunterstown	AEC (6.68%) / APS (3.95%) / ConEd (0.42%) / DPL (9.06%) / JCPL (16.78%) / ME (10.49%) / Neptune* (1.68%) / PECO (18.92%) / PPL (7.52%) / PSEG (22.57%) / RE (0.34%) / UGI (0.95%) / ECP** (0.64%)
b0404.1	Replace South Reading 230 kV breaker 107252	ME (100%)
b0404.2	Replace South Reading 230 kV breaker 100652	ME (100%)
b0575.1	Rebuild Hunterstown – Texas Eastern Tap 115 kV	ME (100%)
b0575.2	Rebuild Texas Eastern Tap – Gardners 115 kV and associated upgrades at Gardners including disconnect switches	ME (100%)
b0650	Reconductor Jackson – JE Baker – Taxville 115 kV line	ME (100%)
b0652	Install bus tie circuit breaker on Yorkana 115 kV bus and expand the Yorkana 230 kV ring bus by one breaker so that the Yorkana 230/115 kV banks 1, 3, and 4 cannot be lost for either B-14 breaker fault or a 230 kV line or bank fault with a stuck breaker	ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## (5) Metropolitan Edison Company

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0653	Construct a 230 kV Bernville station by tapping the North Temple – North Lebanon 230 kV line. Install a 230/69 kV transformer at existing Bernville 69 kV station		ME (100%)
b1000	Replace Portland 115kV breaker '95312'		ME (100%)
b1001	Replace Portland 115kV breaker '92712'		ME (100%)
b1002	Replace Hunterstown 115 kV breaker '96392'		ME (100%)
b1003	Replace Hunterstown 115 kV breaker '96292'		ME (100%)
b1004	Replace Hunterstown 115 kV breaker '99192'		ME (100%)
b1061	Replace existing Yorkana 230/115 kV transformer banks 1 and 4 with a single, larger transformer similar to transformer bank #3		ME (100%)
b1061.1	Replace the Yorkana 115 kV breaker '97282'		ME (100%)
b1061.2	Replace the Yorkana 115 kV breaker 'B282'		ME (100%)
b1302	Replace the limiting bus conductor and wave trap at the Jackson 115 kV terminal of the Jackson – JE Baker Tap 115 kV line		ME (100%)
b1365	Reconductor the Middletown – Collins 115 kV (975) line 0.32 miles of 336 ACSR		ME (100%)

\* Neptune Regional Transmission System, LLC

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**(5) Metropolitan Edison Company**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b1366	Reconductor the Collins – Cly – Newberry 115 kV (975) line 5 miles with 795 ACSR		ME (100%)
b1727	Reconductor 2.4 miles of existing 556 and 795 ACSR from Harley Davidson to Pleasureville 115 kV with 795 ACSS to raise the ratings		ME (100%)
b1800	Install a 500 MVAR SVC at the existing Hunterstown 500kV substation		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> ATSI (0.42%) / BGE (55.33%) / DL (0.15%) / DPL (19.19%) / ME (24.91%)
b1801	Build a 250 MVAR SVC at Altoona 230 kV		AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / Neptune* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)

**(5) Metropolitan Edison Company**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1816.5	Replace SCCIR (Sub-conductor) at Hunterstown Substation on the No. 1, 230/115 kV transformer	ME (100%)
b1999	Replace limiting wave trap, circuit breaker, substation conductor, relay and current transformer components at Northwood	ME (100%)
b2000	Replace limiting wave trap on the Glendon - Hosensack line	ME (100%)
b2001	Replace limiting circuit breaker and substation conductor transformer components at Portland 230kV	ME (100%)
b2002	Northwood 230/115 kV Transformer upgrade	ME (100%)
b2023	Construct a new North Temple - Riverview - Cartech 69 kV line (4.7 miles) with 795 ACSR	ME (100%)
b2024	Upgrade 4/0 substation conductors at Middletown 69 kV	ME (100%)
b2025	Upgrade 4/0 and 350 Cu substation conductors at the Middletown Junction terminal of the Middletown Junction - Wood Street Tap 69 kV line	ME (100%)
b2026	Upgrade an OC protection relay at the Baldy 69 kV substation	ME (100%)
b2148	Install a 115 kV 28.8 MVAR capacitor at Pleasureville substation	ME (100%)

**(5) Metropolitan Edison Company**

Required Transmission Enhancements   Annual Revenue Requirement   Responsible Customer(s)

b2149	Upgrade substation riser on the Smith St. - York Inc. 115 kV line		ME (100%)
b2150	Upgrade York Haven structure 115 kV bus conductor on Middletown Jct. - Zions View 115 kV		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## SCHEDULE 12 – APPENDIX

### (7) Pennsylvania Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.1	Build 500 kV substation in PENELEC – Tap the Keystone – Juniata and Conemaugh – Juniata 500 kV, connect the circuits with a breaker and half scheme, and install new 400 MVAR capacitor	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0284.3	Replace wave trap and upgrade a bus section at Keystone 500 kV – on the Keystone – Airydale 500 kV	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0285.1	Replace wave trap at Keystone 500 kV – on the Keystone – Conemaugh 500 kV	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0285.2	Replace wave trap and relay at Conemaugh 500 kV – on the Conemaugh – Keystone 500 kV	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0349	Upgrade Rolling Meadows-Gore Jct 115 kV	PENELEC (100%)
b0360	Construction of a ring bus on the 345 kV side of Wayne substation	PENELEC (100%)
b0365	Add a 50 MVAR, 230 kV cap bank at Altoona 230 kV	PENELEC (100%)
b0369	Install 100 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0370	Install 500 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

\* Neptune Regional Transmission System, LLC

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0376	Install 300 MVAR capacitor at Conemaugh 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.11%) / BGE (14.99%) / DL (0.25%) / ECP (0.76%) / HTP (0.70%) / JCPL (19.52%) / ME (11.95%) / NEPTUNE (2.12%) / PECO (19.24%) / PSEG (24.38%) / RE (0.98%)</p>
b0442	Spare Keystone 500/230 kV transformer	PENELEC (100%)
b0515	Replace Lewistown circuit breaker 1LY Yeagertown	PENELEC (100%)
b0516	Replace Lewistown circuit breaker 2LY Yeagertown	PENELEC (100%)
b0517	Replace Shawville bus section circuit breaker	PENELEC (100%)
b0518	Replace Homer City circuit breaker 201 Johnstown	PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0519	Replace Keystone circuit breaker 4 Transformer - 20	PENELEC (100%)
b0549	Install 250 MVAR capacitor at Keystone 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.17%) / ATSI (0.35%) / BGE (20.18%) / DL (0.15%) / ECP (0.60%) / HTP (0.54%) / JCPL (17.10%) / ME (13.58%) / NEPTUNE (1.86%) / PECO (19.27%) / PSEG (20.38%) / RE (0.82%)</p>
b0550	Install 25 MVAR capacitor at Lewis Run 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0551	Install 25 MVAR capacitor at Saxton 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0552	Install 50 MVAR capacitor at Altoona 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0553	Install 50 MVAR capacitor at Raystown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0555	Install 100 MVAR capacitor at Johnstown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0556	Install 50 MVAR capacitor at Grover 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0557	Install 75 MVAR capacitor at East Towanda 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0563	Install 25 MVAR capacitor at Farmers Valley 115 kV substation	PENELEC (100%)
b0564	Install 10 MVAR capacitor at Ridgeway 115 kV substation	PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0654	Reconfigure the Cambria Slope 115 kV and Wilmore Junction 115 kV stations to eliminate Wilmore Junction 115 kV 3-terminal line		PENELEC (100%)
b0655	Reconfigure and expand the Glade 230 kV ring bus to eliminate the Glade Tap 230 kV 3-terminal line		PENELEC (100%)
b0656	Add three breakers to form a ring bus at Altoona 230 kV		PENELEC (100%)
b0794	Upgrade the Homer City 230 kV breaker 'Pierce Road'		PENELEC (100%)
b1005	Replace Glory 115 kV breaker '#7 XFMR'		PENELEC (100%)
b1006	Replace Shawville 115 kV breaker 'NO.14 XFMR'		PENELEC (100%)
b1007	Replace Shawville 115 kV breaker 'NO.15 XFMR'		PENELEC (100%)
b1008	Replace Shawville 115 kV breaker '#1B XFMR'		PENELEC (100%)
b1009	Replace Shawville 115 kV breaker '#2B XFMR'		PENELEC (100%)
b1010	Replace Shawville 115 kV breaker 'Dubois'		PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1011	Replace Shawville 115 kV breaker 'Philipsburg'	PENELEC (100%)
b1012	Replace Shawville 115 kV breaker 'Garman'	PENELEC (100%)
b1059	Replace a CRS relay at Hooversville 115 kV station	PENELEC (100%)
b1060	Replace a CRS relay at Rachel Hill 115 kV station	PENELEC (100%)
b1153	Upgrade Conemaugh 500/230 kV transformer and add a new line from Conemaugh-Seward 230 kV	AEC (3.72%) / APS (6.23%) / BGE (16.75%) / ConEd (0.39%) / DL (0.32%) / JCPL (12.52%) / ME (6.87%) / PECO (11.49%) / PEPCO (0.55%) / PPL (15.36%) / PSEG (20.44%) / RE (0.71%) / NEPTUNE*(1.70%) / ECP** (2.95%)
b1153.1	Revise the reclosing on the Shelocta 115 kV breaker 'Lucerne'	PENELEC (100%)
b1169	Replace Shawville 115 kV breaker '#1A XFMR'	PENELEC (100%)
b1170	Replace Shawville 115 kV breaker '#2A XFMR'	PENELEC (100%)
b1277	Build a new Osterburg East – Bedford North 115 kV Line, 5.7 miles of 795 ACSR	PENELEC (100%)
b1278	Install 25 MVAR Capacitor Bank at Somerset 115 kV	PENELEC (100%)

## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1367	Replace the Cambria Slope 115/46 kV 50 MVA transformer with 75 MVA	PENELEC (100%)
b1368	Replace the Claysburg 115/46 kV 30 MVA transformer with 75 MVA	PENELEC (100%)
b1369	Replace the 4/0 CU substation conductor with 795 ACSR on the Westfall S21 Tap 46 kV line	PENELEC (100%)
b1370	Install a 3rd 115/46 kV transformer at Westfall	PENELEC (100%)
b1371	Reconductor 2.6 miles of the Claysburg – HCR 46 kV line with 636 ACSR	PENELEC (100%)
b1372	Replace 4/0 CU substation conductor with 795 ACSR on the Hollidaysburg – HCR 46 kV	PENELEC (100%)
b1373	Re-configure the Erie West 345 kV substation, add a new circuit breaker and relocate the Ashtabula line exit	PENELEC (100%)
b1374	Replace wave traps at Raritan River and Deep Run 115 kV substations with higher rated equipment for both B2 and C3 circuits	PENELEC (100%)
b1535	Reconductor 0.8 miles of the Gore Junction – ESG Tap 115 kV line with 795 ACSS	PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1607	Reconductor the New Baltimore - Bedford North 115 kV	PENELEC (100%)
b1608	Construct a new 345/115 kV substation and loop the Mansfield - Everts 115 kV	APS (8.57%) / ConEd (0.47%) / PECO (1.71%) / PENELEC (89.25%)
b1609	Construct Four Mile Junction 230/115 kV substation. Loop the Erie South - Erie East 230 kV line, Buffalo Road - Corry East and Buffalo Road - Erie South 115 kV lines	APS (4.86%) / PENELEC (95.14%)
b1610	Install a new 230 kV breaker at Yeagertown	PENELEC (100%)
b1713	Install a 345 kV breaker at Erie West and relocate Ashtabula 345 kV line	PENELEC (100%)
b1769	Install a 75 MVAR cap bank on the Four Mile 230 kV bus	PENELEC (100%)
b1770	Install a 50 MVAR cap bank on the Buffalo Road 115 kV bus	PENELEC (100%)
b1802	Build a 100 MVAR Fast Switched Shunt and 200 MVAR Switched Shunt at Mansfield 345 kV	AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / NEPTUNE* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1821	Replace the Erie South 115 kV breaker 'Union City'	PENELEC (100%)
b1943	Construct a 115 kV ring bus at Claysburg Substation. Bedford North and Saxton lines will no longer share a common breaker	PENELEC (100%)
b1944	Reconductor Eclipse substation 115 kV bus with 1033 kcmil conductor	PENELEC (100%)
b1945	Install second 230/115 kV autotransformer at Johnstown	PENELEC (100%)
b1966	Replace the 1200 Amp Line trap at Lewistown on the Raystown-Lewistown 230 kV line and replace substation conductor at Lewistown	PENELEC (100%)
b1967	Replace the Blairsville 138/115 kV transformer	PENELEC (100%)
b1990	Install a 25 MVAR 115 kV Capacitor at Grandview	PENELEC (100%)
b1991	Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the Homer City-Stolle Road 345 kV line into Farmers Valley	PENELEC (100%)
b1992	Reconductor Cambria Slope-Summit 115kV with 795 ACSS Conductor	PENELEC (100%)

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## Pennsylvania Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1993	Relocate the Erie South 345 kV line terminal	APS (10.09%) / ECP** (0.45%) / HTP (0.49%) / JCPL (5.14%) / Neptune* (0.54%) / PENELEC (70.71%) / PSEG (12.10%) / RE (0.48%)
b1994	Convert Lewis Run-Farmers Valley to 230 kV using 1033.5 ACSR conductor. Project to be completed in conjunction with new Farmers Valley 345/230 kV transformation	APS (33.20%) / ECP** (0.44%) / HTP (0.44%) / JCPL (8.64%) / ME (5.52%) / Neptune (0.86%) / PENELEC (36.81%) / PSEG (13.55%) / RE (0.54%)
b1995	Change CT Ratio at Claysburg	PENELEC (100%)
b1996.1	Replace 600 Amp Disconnect Switches on Ridgeway-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1996.2	Reconductor Ridgeway and Whetstone 115 kV Bus	PENELEC (100%)
b1996.3	Replace Wave Trap at Ridgeway	PENELEC (100%)
b1996.4	Change CT Ratio at Ridgeway	PENELEC (100%)
b1997	Replace 600 Amp Disconnect Switches on Dubois-Harvey Run-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)

**Pennsylvania Electric Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville		PENELEC (100%)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

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## SCHEDULE 12 – APPENDIX

### (8) PECO Energy Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0171.1	Replace two 500 kV circuit breakers and two wave traps at Elroy substation to increase rating of Elroy - Hosensack 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPSCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.78%) / DPL (6.88%) / JCPL (10.93%) / ME (2.74%) / NEPTUNE (0.27%) / PECO (48.97%) / PSEG (24.45%) / RE (0.98%)</p>
b0180	Replace Whitpain 230kV circuit breaker #165	PECO (100%)
b0181	Replace Whitpain 230kV circuit breaker #J105	PECO (100%)
b0182	Upgrade Plymouth Meeting 230kV circuit breaker #125	PECO (100%)
b0205	Install three 28.8Mvar capacitors at Planebrook 35kV substation	PECO (100%)
b0206	Install 161Mvar capacitor at Planebrook 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)

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## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0207	Install 161Mvar capacitor at Newlinville 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)
b0208	Install 161Mvar capacitor Heaton 230kV substation	AEC (14.14%) / ConEd (0.43%) / DPL (24.29%) / PECO (57.69%) / PSEG (3.45%)
b0209	Install 2% series reactor at Chichester substation on the Chichester - Mickleton 230kV circuit	AEC (64.81%) / ConEd (0.65%) / JCPL (25.70%) / Neptune* (2.53%) / PSEG (6.31%)
b0264	Upgrade Chichester – Delco Tap 230 kV and the PECO portion of the Delco Tap – Mickleton 230 kV circuit	AEC (88.94%) / ConEd (1.04%) / JCPL (9.38%) / Neptune* (0.64%)
b0266	Replace two wave traps and ammeter at Peach Bottom, and two wave traps and ammeter at Newlinville 230 kV substations	PECO (100%)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)†
		<b>DFAX Allocation:</b> PECO (100%)

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\*\*\*Hudson Transmission Partners, LLCPECO Energy Company (cont.)

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.1	Add a new 230 kV circuit between Whitpain and Heaton substations	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.2	Reconductor the Whitpain 1 – Plymtg 1 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.3	Convert the Heaton bus to a ring bus	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.4	Reconductor the Heaton – Warminster 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.5	Reconductor Warminster – Buckingham 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††

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†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269.6	Add a new 500 kV breaker at Whitpain between #3 transformer and 5029 line	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  PECO (100%)</p>
b0269.7	Replace North Wales 230 kV breaker #105	PECO (100%)
b0280.1	Install 161 MVAR capacitor at Warrington 230 kV substation	PECO 100%
b0280.2	Install 161 MVAR capacitor at Bradford 230 kV substation	PECO 100%
b0280.3	Install 28.8 MVAR capacitor at Warrington 34 kV substation	PECO 100%
b0280.4	Install 18 MVAR capacitor at Waverly 13.8 kV substation	PECO 100%

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††Cost allocations associated with below 500 kV elements of the project

**PECO Energy Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0287	Install 600 MVAR Dynamic Reactive Device in Whitpain 500 kV vicinity		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEC (4.78%) / DPL (6.88%) / JCPL (10.93%) / ME (2.74%) / NEPTUNE (0.27%) / PECO (48.97%) / PSEG (24.45%) / RE (0.98%)
b0351	Reconductor Tunnel – Grays Ferry 230 kV		PECO (100%)
b0352	Reconductor Tunnel – Parrish 230 kV		PECO (100%)
b0353.1	Install 2% reactors on both lines from Eddystone – Llanerch 138 kV		PECO (100%)
b0353.2	Install identical second 230/138 kV transformer in parallel with existing 230/138 kV transformer at Plymouth Meeting		PECO 100%
b0353.3	Replace Whitpain 230 kV breaker 135		PECO (100%)
b0353.4	Replace Whitpain 230 kV breaker 145		PECO (100%)

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†† Cost allocations associated with below 500 kV elements of the project

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0354	Eddystone – Island Road Upgrade line terminal equipment	PECO 100%
b0355	Reconductor Master – North Philadelphia 230 kV line	PECO 100%
b0357	Reconductor Buckingham – Pleasant Valley 230 kV	ConEd (1.05%) / JCPL (36.78%) / Neptune* (4.41%) / PSEG (53.57%) / RE (2.30%) / ECP** (1.89%)
b0359	Reconductor North Philadelphia – Waneeta 230 kV circuit	PECO 100%
b0402.1	Replace Whitpain 230 kV breaker #245	PECO (100%)
b0402.2	Replace Whitpain 230 kV breaker #255	PECO (100%)
b0438	Spare Whitpain 500/230 kV transformer	PECO (100%)
b0443	Spare Peach Bottom 500/230 kV transformer	PECO (100%)
b0505	Reconductor the North Wales – Whitpain 230 kV circuit	AEC (8.56%) / ConEd (0.21%) / DPL (7.74%) PECO (83.49%)
b0506	Reconductor the North Wales – Hartman 230 kV circuit	AEC (8.56%) / ConEd (0.21%) / DPL (7.74%) PECO (83.49%)
b0507	Reconductor the Jarrett – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) PECO (83.66%)
b0508.1	Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit	PECO (100%)
b0509	Reconductor the Jarrett – Heaton 230 kV circuit	PECO (100%)

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0727	Rebuild Bryn Mawr – Plymouth Meeting 138 kV line	AEC (1.25%) / DPL (3.11%) / PECO (95.64%)
b0789	Reconductor the line to provide a normal rating of 677 MVA and an emergency rating of 827 MVA	AEC (0.72%) / JCPL (17.36%) / NEPTUNE* (1.70%) / PECO (44.47%) / ECP** (0.92%) / PSEG (33.52%) / RE (1.31%)
b0790	Reconductor the Bradford – Planebrook 230 kV Ckt. 220-31 to provide a normal rating of 677 MVA and emergency rating of 827 MVA	JCPL (17.30%) / NEPTUNE* (1.69%) / PECO (45.09%) / ECP** (0.93%) / PSEG (33.68%) / RE (1.31%)
b0829.1	Replace Whippain 230 kV breaker '155'	PECO (100%)
b1073	Install 2 new 230 kV breakers at Planebrook (on the 220-02 line terminal and on the 230 kV side of the #9 transformer)	PECO (100%)
b0829.2	Replace Whippain 230 kV breaker '525'	PECO (100%)
b0829.3	Replace Whippain 230 kV breaker '175'	PECO (100%)
b0829.4	Replace Plymouth Meeting 230 kV breaker '225'	PECO (100%)
b0829.5	Replace Plymouth Meeting 230 kV breaker '335'	PECO (100%)
b0841	Move the connection points for the 2nd Plymouth Meeting 230/138 kV XFMR	PECO (100%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0842	Install a 2nd 230/138 kV XFMR and 35 MVAR CAP at Heaton 138 kV bus		PECO (100%)
b0842.1	Replace Heaton 138 kV breaker '150'		PECO (100%)
b0843	Install a 75 MVAR CAP at Llanerch 138 kV bus		PECO (100%)
b0844	Move the connection point for the Llanerch 138/69 kV XFMR		PECO (100%)
b0887	Replace Richmond-Tacony 69 kV line		PECO (100%)
b0920	Replace station cable at Whitpain and Jarrett substations on the Jarrett - Whitpain 230 kV circuit		PECO (100%)
b1014.1	Replace Circuit breaker, Station Cable, CTs and Wave Trap at Eddystone 230 kV		PECO (100%)
b1014.2	Replace Circuit breaker, Station Cable, CTs Disconnect Switch and Wave Trap at Island Rd. 230 kV		PECO (100%)
b1015	Replace Breakers #115 and #125 at Printz 230 kV substation		PECO (100%)
b1156.1	Upgrade at Richmond 230 kV breaker '525'		PECO (100%)
b1156.2	Upgrade at Richmond 230 kV breaker '415'		PECO (100%)
b1156.3	Upgrade at Richmond 230 kV breaker '475'		PECO (100%)
b1156.4	Upgrade at Richmond 230 kV breaker '575'		PECO (100%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1156.5	Upgrade at Richmond 230 kV breaker '185'	PECO (100%)
b1156.6	Upgrade at Richmond 230 kV breaker '285'	PECO (100%)
b1156.7	Upgrade at Richmond 230 kV breaker '85'	PECO (100%)
b1156.8	Upgrade at Waneeta 230 kV breaker '425'	PECO (100%)
b1156.9	Upgrade at Emilie 230 kV breaker '815'	PECO (100%)
b1156.10	Upgrade at Plymouth Meeting 230 kV breaker '265'	PECO (100%)
b1156.11	Upgrade at Croydon 230 kV breaker '115'	PECO (100%)
b1156.12	Replace Emilie 138 kV breaker '190'	PECO (100%)
b1178	Add a second 230/138 kV transformer at Chichester. Add an inductor in series with the parallel transformers	JCPL (4.14%) / Neptune (0.44%) / PECO (82.19%) / ECP (0.33%) / HTP (0.32%) / PSEG (12.10%) / RE (0.48%)
b1179	Replace terminal equipment at Eddystone and Saville and replace underground section of the line	PECO (100%)
b1180.1	Replace terminal equipment at Chichester	PECO (100%)
b1180.2	Replace terminal equipment at Chichester	PECO (100%)
b1181	Install 230/138 kV transformer at Eddystone	PECO (100%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1182	Reconductor Chichester – Saville 138 kV line and upgrade terminal equipment	JCPL (5.08%) / Neptune (0.54%) / PECO (78.85%) / ECP (0.39%) / HTP (0.38%) / PSEG (14.20%) / RE (0.56%)
b1183	Replace 230/69 kV transformer #6 at Cromby. Add two 50 MVAR 230 kV banks at Cromby	PECO (100%)
b1184	Add 138 kV breakers at Cromby, Perkiomen, and North Wales; add a 35 MVAR capacitor at Perkiomen 138 kV	PECO (100%)
b1185	Upgrade Eddystone 230 kV breaker #365	PECO (100%)
b1186	Upgrade Eddystone 230 kV breaker #785	PECO (100%)
b1197	Reconductor the PECO portion of the Burlington – Croydon circuit	PECO (100%)
b1198	Replace terminal equipments including station cable, disconnects and relay at Conowingo 230 kV station	PECO (100%)
b1338	Replace Printz 230 kV breaker ‘225’	PECO (100%)
b1339	Replace Printz 230 kV breaker ‘315’	PECO (100%)
b1340	Replace Printz 230 kV breaker ‘215’	PECO (100%)
b1398.6	Reconductor the Camden – Richmond 230 kV circuit (PECO portion) and upgrade terminal equipments at Camden substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.8	Reconductor Richmond – Waneeta 230 kV and replace terminal equipments at Richmond and Waneeta substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.12	Replace Graysferry 230 kV breaker ‘115’	PECO (100%)
b1398.13	Upgrade Peach Bottom 500 kV breaker ‘225’	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)†
b1398.14	Replace Whitpain 230 kV breaker ‘105’	PECO (100%)
b1590.1	Upgrade the PECO portion of the Camden – Richmond 230 kV to a six wire conductor and replace terminal equipment at Richmond.	BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPCO (1.93%) / PPL (2.46%) / ECP** (0.16%)
b1591	Reconductor the underground portion of the Richmond – Waneeta 230 kV and replace terminal equipment	BGE (4.54%) / DL (0.27%) / ME (1.04%) / HTP (0.03%) / PECO (88.08%) / PEPCO (2.79%) / PPL (3.25%)

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**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1717	Install a second Waneeta 230/138 kV transformer on a separate bus section	HTP (0.04%) / PECO (99.96%)
b1718	Reconductor the Crescentville - Foxchase 138 kV circuit	PECO (100%)
b1719	Reconductor the Foxchase - Bluegrass 138 kV circuit	PECO (100%)
b1720	Increase the effective rating of the Eddystone 230/138 kV transformer by replacing a circuit breaker at Eddystone	PECO (100%)
b1721	Increase the rating of the Waneeta - Tuna 138 kV circuit by replacing two 138 kV CTs at Waneeta	PECO (100%)
b1722	Increase the normal rating of the Cedarbrook - Whitemarsh 69 kV circuit by changing the CT ratio and replacing station cable at Whitemarsh 69 kV	PECO (100%)
b1768	Install 39 MVAR capacitor at Cromby 138 kV bus	PECO (100%)
b1900	Add a 3rd 230 kV transmission line between Chichester and Linwood substations and remove the Linwood SPS	PECO (69.62%) / JCPL (6.02%) / ATSI (1.23%) / PSEG (20.83%) / RE (0.83%) / NEPTUNE* (0.59%) / ECP** (0.45%) / HTP (0.43%)
b2140	Install a 3rd Emilie 230/138 kV transformer	PECO (97.04%) / ECP** (1.62%) / HTP (1.34%)
b2145	Replace two sections of conductor inside Richmond substation	PECO (100%)

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## SCHEDULE 12 – APPENDIX

### (9) PPL Electric Utilities Corporation

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0074	Rebuild 12 miles of S. Akron – Berks 230 kV to double circuit, looping Met Ed's S. Lebanon – S. Reading line into Berks; replacement of S. Reading 230 kV breaker 107252	PPL (100%)
b0171.2	Replace wavetrap at Hosensack 500kV substation to increase rating of Elroy - Hosensack 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.78%) / DPL (6.88%) / JCPL (10.93%) / ME (2.74%) / NEPTUNE (0.27%) / PECO (48.97%) / PSEG (24.45%) / RE (0.98%)
b0172.1	Replace wave trap at Alburtis 500kV substation	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)

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**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.2	Replace two wave traps at Juniata 500 kV – on the two Juniata – Airydale 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.11%) / BGE (14.99%) / DL (0.25%) / ECP (0.76%) / HTP (0.70%) / JCPL (19.52%) / ME (11.95%) / NEPTUNE (2.12%) / PECO (19.24%) / PSEG (24.38%) / RE (0.98%)</p>
b0284.4	Changes at Juniata 500 kV substation	PPL (100%)
b0293.1	Replace wavetrap at the Martins Creek 230 kV bus	PPL (100%)
b0293.2	Raise the operating temperature of the 2-1590 ACSR to 140C for the Martins Creek – Portland 230 kV circuit	PPL (100%)
b0440	Spare Juniata 500/230 kV transformer	PPL (100%)
b0468	Build a new substation with two 150 MVA transformers between Dauphin and Hummelstown 230/69 kV substations by sectionalizing the Middletown Junction – New Lebanon 230 kV line	JCPL (4.55%) / Neptune* (0.37%) / PECO (1.79%) / PENELEC (0.33%) / PPL (86.63%) / ECP** (0.18%) / PSEG (5.93%) / RE (0.22%)
b0469	Install 130 MVAR capacitor at West Shore 230 kV line	PPL (100%)

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**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0487	Build new 500 kV transmission facilities from Susquehanna to Pennsylvania – New Jersey border at Bushkill	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.63%) / HTP (2.97%) / JCPL (30.22%) / NEPTUNE (3.81%) / PSEG (58.04%) / RE (2.33%)</p>
b0487.1	Install Lackawanna 500/230 kV transformer and upgrade 230 kV substation and switchyard	PENELEC (16.90%) / PPL (77.59%) / ECP** (0.19%) / PSEG (5.13%) / RE (0.19%)
b0500.1	Conastone – Otter Creek 230 kV – Reconductor approximately 17.2 miles of 795 kmil ACSR with new 795 kmil ACSS operated at 160 deg C	AEC (6.27%) / DPL (8.65%) / JCPL (14.54%) / ME (10.59%) / Neptune* (1.37%) / PECO (15.66%) / PPL (21.02%) / ECP** (0.57%) / PSEG (20.56%) / RE (0.77%)

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The Annual Revenue Requirements associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-8G.

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0558	Install 250 MVAR capacitor at Juniata 500 kV substation	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0593	Eldred – Pine Grove 69 kV line Rebuild Part 2: 8 miles	PPL (100%)
b0595	Rebuild Lackawanna – Edella 69 kV line to double circuit	PPL (100%)
b0596	Reconductor and rebuild Stanton – Providence 69 kV #1 and #2 lines with 69 kV design; approximately 8 miles total	PPL (100%)
b0597	Reconductor Suburban – Providence 69 kV #1 and resectionalize the Suburban 69 kV lines	PPL (100%)
b0598	Reconductor Suburban Taps #1 and #2 for 69 kV line portions	PPL (100%)
b0600	Tripp Park Substation: 69 kV tap off Stanton – Providence 69 kV line #3 to new substation	PPL (100%)
b0601	Jessup Substation: New 138/69 kV tap off of Peckville – Jackson 138/69 kV line	PPL (100%)

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**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0604	Add 150 MVA, 230/138/69 transformer #6 to Harwood substation		PPL (100%)
b0605	Reconductor Stanton – Old Forge 69 kV line and resectionalize the Jenkins – Scranton 69 kV #1 and #2 lines		PPL (100%)
b0606	New 138 kV tap off Monroe – Jackson 138 kV #1 line to Bartonsville substation		PPL (100%)
b0607	New 138 kV taps off Monroe – Jackson 138 kV lines to Stroudsburg substation		PPL (100%)
b0608	New 138 kV tap off Siegfried – Jackson 138 kV #2 to transformer #2 at Gilbert substation		PPL (100%)
b0610	At South Farmersville substation, a new 69 kV tap off Nazareth – Quarry #2 to transformer #2		PPL (100%)
b0612	Rebuild Siegfried – North Bethlehem portion (6.7 miles) of Siegfried – Quarry 69 kV line		PPL (100%)
b0613	East Tannersville Substation: New 138 kV tap to new substation		PPL (100%)
b0614	Elroy substation expansion and new Elroy – Hatfield 138/69 kV double circuit lines (1.9 miles)		PPL (100%)
b0615	Reconductor and rebuild 12 miles of Seidersville – Quakerstown 138/69 kV and a new 75 MVA, 230/69 kV transformer #4		PPL (100%)
b0616	New Springfield 230/69 kV substation and transmission line connections		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0620	New 138 kV line and terminal at Monroe 230/138 substation		PPL (100%)
b0621	New 138 kV line and terminal at Siegfried 230/138 kV substation and add a second circuit to Siegfried – Jackson for 8.0 miles		PPL (100%)
b0622	138 kV yard upgrades and transmission line rearrangements at Jackson 138/69 kV substation		PPL (100%)
b0623	New West Shore – Whitehill Taps 138/69 kV double circuit line (1.3 miles)		PPL (100%)
b0624	Reconductor Cumberland – Wertzville 69 kV portion (3.7 miles) of Cumberland – West Shore 69 kV line		PPL (100%)
b0625	Reconductor Mt. Allen – Rossmoyne 69 kV portions (1.6 miles) of West Shore – Cumberland #3 and #4 lines		PPL (100%)
b0627	Replace UG cable from Walnut substation to Center City Harrisburg substation for higher ampacity (0.25 miles)		PPL (100%)
b0629	Lincoln substation: 69 kV tap to convert to modified Twin A		PPL (100%)
b0630	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild from Landisville Tap – Mt. Joy (2 miles)		PPL (100%)
b0631	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild to double circuit from Mt. Joy – Donegal (2 miles)		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0632	Terminate new S. Manheim – Donegal 69 kV circuit into S. Manheim 69 kV #3		PPL (100%)
b0634	Rebuild S. Manheim – Fuller 69 kV portion (1.0 mile) of S. Manheim – West Hempfield 69 kV #3 line into a 69 kV double circuit		PPL (100%)
b0635	Reconductor Fuller Tap – Landisville 69 kV (4.1 miles) into a 69 kV double circuit		PPL (100%)
b0703	Berks substation modification on Berks – South Akron 230 kV line. Modification will isolate the line fault on the South Akron line and will allow Berks transformer #2 to be energized by the South Lebanon 230 kV circuit		PPL (100%)
b0705	New Derry – Millville 69 kV line		PPL (100%)
b0707	Construct Bohemia – Twin Lakes 69 kV line, install a 10.9 MVAR capacitor bank near Bohemia 69 kV substation		PPL (100%)
b0708	New 69 kV double circuit from Jackson – Lake Naomi Tap		PPL (100%)
b0709	Install new 69 kV double circuit from Carlisle – West Carlisle		PPL (100%)
b0710	Install a third 69 kV line from Reese’s Tap to Hershey substation		PPL (100%)
b0711	New 69 kV that taps West Shore – Cumberland 69 kV #1 to Whitehill 69 kV substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0712	Construct a new 69 kV line between Strassburg Tap and the Millwood – Engleside 69 kV #1 line		PPL (100%)
b0713	Construct a new 138 kV double circuit line between Dillersville Tap and the West Hempfield – Prince 138 kV line		PPL (100%)
b0714	Prepare Roseville Tap for 138 kV conversion		PPL (100%)
b0715	Transfer S. Akron – S. Manheim #1 and #2 lines from the S. Akron 69 kV Yard to the S. Akron 138 kV Yard; Install switches on S. Akron – S. Manheim 138 kV #1 and #2 lines		PPL (100%)
b0716	Add a second 69 kV line from Morgantown – Twin Valley		PPL (100%)
b0717	Rebuild existing Brunner Island – West Shore 230 kV line and add a second Brunner Island – West Shore 230 kV line		PPL (100%)
b0718	SPS scheme to drop 190 MVA of 69 kV radial load at West Shore and 56 MVA of 69 kV radial load at Cumberland		PPL (100%)
b0719	SPS scheme at Jenkins substation to open the Stanton #1 and Stanton #2 230 kV circuit breakers after the second contingency		PPL (100%)
b0791	Add a fourth 230/69 kV transformer at Stanton		PENELEC (9.55%) / PPL (90.45%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1074	Install motor operators on the Jenkins 230 kV '2W' disconnect switch and build out Jenkins Bay 3 and have MOD '3W' operated as normally open		PPL (100%)
b0881	Install motor operators on Susquehanna T21 - Susquehanna 230 kV line East CB at Susquehanna 230 kV switching station		PPL (100%)
b0908	Install motor operators at South Akron 230 kV		PPL (100%)
b0909	Convert Jenkins 230 kV yard into a 3-breaker ring bus		PPL (100%)
b0910	Install a second 230 kV line between Jenkins and Stanton		PPL (100%)
b0911	Install motor operators at Frackville 230 kV		PPL (100%)
b0912	Install 2, 10.8 MVAR capacitor banks at Scranton 69 kV		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0913	Extend Cando Tap to the Harwood-Jenkins #2 69 kV line		PPL (100%)
b0914	Build a 3rd 69 kV line from Harwood to Valmont Taps		PPL (100%)
b0915	Replace Walnut-Center City 69 kV cable		PPL (100%)
b0916	Reconductor Sunbury-Dalmatia 69 kV line		PPL (100%)
b1021	Install a new (#4) 138/69 kV transformer at Wescosville		PPL (100%)
b1196	Remove the Siegfried bus tie breaker and install a new breaker on the Martins Creek 230 kV line west bay to maintain two ties between the 230 kV buses		PPL (100%)
b1201	Rebuild the Hercules Tap to Double Circuit 69 kV		PPL (100%)
b1202	Mack-Macungie Double Tap, Single Feed Arrangement		PPL (100%)
b1203	Add the 2nd Circuit to the East Palmerton-Wagners-Lake Naomi 138/69 kV Tap		PPL (100%)
b1204	New Breinigsville 230-69 kV Substation		PPL (100%)
b1205	Siegfried-East Palmerton #1 69 kV Line- Install new 69 kV LSAB, Sectionalize, and Transfer Treichlers Substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1206	Siegfried-Quarry #1 & #2 69 kV Lines- Rebuild 3.3 mi from Quarry Substation to Macada Taps	PPL (100%)
b1209	Convert Neffsville Taps from 69 kV to 138 kV Operation	PPL (100%)
b1210	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 1 – operate on the 69 kV system)	PPL (100%)
b1211	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 2 – operate on the 138 kV system)	PPL (100%)
b1212	New 138 kV Taps to Flory Mill 138/69 kV Substation	PPL (100%)
b1213	Convert East Petersburg Taps from 69 kV to 138 kV operation, install two 10.8 MVAR capacitor banks	PPL (100%)
b1214	Terminate South Manheim-Donegal #2 at South Manheim, Reduce South Manheim 69 kV Capacitor Bank, Resectionalize 69 kV	PPL (100%)
b1215	Reconductor and rebuild 16 miles of Peckville-Varden 69 kV line and 4 miles of Blooming Grove-Honesdale 69 kV line	PPL (100%)
b1216	Build approximately 2.5 miles of new 69 kV transmission line to provide a “double tap – single feed” connection to Kimbles 69/12 kV substation	PPL (100%)
b1217	Provide a “double tap – single feed” connection to Tafton 69/12 kV substation	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1524	Build a new Pocono 230/69 kV substation	PPL (100%)
b1524.1	Build approximately 14 miles new 230 kV South Pocono – North Pocono line	PPL (100%)
b1524.2	Install MOLSABs at Mt. Pocono substation	PPL (100%)
b1525	Build new West Pocono 230/69 kV Substation	PPL (100%)
b1525.1	Build approximately 14 miles new 230 kV Jenkins-West Pocono 230 kV Line	PPL (100%)
b1525.2	Install Jenkins 3E 230 kV circuit breaker	PPL (100%)
b1526	Install a new Honeybrook – Twin Valley 69/138 kV tie	PPL (100%)
b1527	Construct a new 230/69 kV North Lancaster substation. The sub will be supplied from the SAKR-BERK 230kV Line	PPL (100%)
b1527.1	Construct new 69/138 kV transmission from North Lancaster 230/69 kV sub to Brecknock and Honeybrook areas	PPL (100%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlerstown #1 & #2 69 kV lines at East Texas Substation	PPL (100%)



**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1529	Add a double breaker 230 kV bay 3 at Hosensack		PPL (100%)
b1530	Replace Lock Haven 69kV ring bus with standard breaker and half design		PPL (100%)
b1532	Install new 32.4 MVAR capacitor bank at Sunbury		PPL (100%)
b1533	Rebuild Lycoming-Lock Haven #1 and Lycoming-Lock Haven #2 69kV lines		PPL (100%)
b1534	Rebuild 1.4 miles of the Sunbury-Milton 69kV		PPL (100%)
b1601	Re-configure the Breinigsville 500 kV substation with addition two 500 kV circuit breakers		AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)†
b1602	Re-configure the Elimsport 230 kV substation to breaker and half scheme and install 80 MVAR capacitor		PPL (100%)
b1740	Install a 90 MVAR cap bank on the Frackville 230 kV bus #207973		PPL (100%)
b1756	Install a 3rd West Shore 230/69 kV transformer		PPL (100%)

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**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1757	Install a 230 kV motor-operated air-break switch on the Clinton - Elimsport 230 kV line	PPL (100%)
b1758	Rebuild 1.65 miles of Columbia - Danville 69 kV line	PPL (100%)
b1759	Install a 69 kV 16.2 MVAR Cap at Milton substation	PPL (100%)
b1760	Install motor operated devices on the existing disconnect switches that are located on each side of all four 230 kV CBs at Stanton	PPL (100%)
b1761	Build a new Paupack - North 230 kV line (Approximately 21 miles)	PPL (100%)
b1762	Replace 3.7 miles of the existing 230 kV Blooming Grove - Peckville line by building 8.4 miles of new 230 kV circuit onto the Lackawanna - Hopatcong tower-line	PPL (100%)
b1763	Re-terminate the Peckville - Jackson and the Peckville - Varden 69 kV lines from Peckville into Lackawanna	PPL (100%)
b1764	Build a new 230-69 kV substations (Paupack)	PPL (100%)
b1765	Install a 16.2 MVAR capacitor bank at Bohemia 69-12 kV substation	PPL (100%)
b1766	Reconductor/rebuild 3.3 miles of the Siegfried - Quarry #1 and #2 lines	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1767	Install 6 motor-operated disconnect switches at Quarry substation		PPL (100%)
b1788	Install a new 500 kV circuit breaker at Wescosville		PPL (100%)
b1890	Add a second 230/69 kV transformer at North Pocono (NE/Pocono Reliability Project)		PPL (100%)
b1891	Build a new 230/138 kV Yard at Lackawanna (138 kV conversion from Lackawanna to Jenkins)		PPL (100%)
b1892	Rebuild the Throop Taps for 138 kV operation (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1893	Swap the Staton - Old Forge and Stanton - Brookside 69 kV circuits at Stanton (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1894	Rebuild and re-conductor 2.5 miles of the Stanton - Avoca 69 kV line		PPL (100%)
b1895	Rebuild and re-conductor 4.9 miles of the Stanton - Providence #1 69 kV line		PPL (100%)
b1896	Install a second 230/138 kV transformer and expand the 138 kV yard at Monroe		PPL (100%)
b1897	Build a new 230/138 kV substation at Jenkins (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1898	Install a 69 kV Tie Line between Richfield and Dalmatia substations		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2004	Replace the CTs and switch in South Akron Bay 4 to increase the rating		PPL (100%)
b2005	Replace the CTs and switch in SAKR Bay 3 to increase the rating of the Millwood-South Akron 230 kV Line and of the rating in Bay 3		PPL (100%)
b2006	Install North Lancaster 500/230 kV substation (below 500 kV portion)		AEC (1.10%) / ECP** (0.37%) / HTP (0.37%) / JCPL (9.61%) / ME (19.42%) / Neptune* (0.75%) / PECO (6.01%) / PPL (50.57%) / PSEG (11.35%) / RE (0.45%)
b2006.1	Install North Lancaster 500/230 kV substation (500 kV portion)		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> ME (22.53%) / PPL (77.47%)
b2007	Install a 90 MVAR capacitor bank at the Frackville 230 kV Substation		PPL (100%)
b2158	Install 10.8 MVAR capacitor at West Carlisle 69/12 kV substation		PPL (100%)

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## SCHEDULE 12 – APPENDIX

### (10) Potomac Electric Power Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0146	Installation of (2) new 230 kV circuit breakers at Quince Orchard substation on circuits 23028 and 23029	PEPCO (100%)
b0219	Install two new 230 kV circuits between Palmers Corner and Blue Plains	PEPCO (100%)
b0228	Upgrade Burtonsville – Sandy Springs 230 kV circuit	PEPCO (100%)
b0238.1	Modify Dickerson Station H 230 kV	PEPCO (100%)
b0251	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0252	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0288	Brighton Substation – add 2 <sup>nd</sup> 1000 MVA 500/230 kV transformer, 2 500 kV circuit breakers and miscellaneous bus work	BGE (19.33%) / Dominion (17%) / PEPCO (63.67%)
b0319	Add a second 1000 MVA Bruches Hill 500/230 kV transformer	PEPCO (100%)
b0366	Install a 4 <sup>th</sup> Ritchie 230/69 kV transformer	PEPCO (100%)
b0367.1	Reconductor circuit “23035” for Dickerson – Quince Orchard 230 kV	AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)
b0367.2	Reconductor circuit “23033” for Dickerson – Quince Orchard 230 kV	AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)

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The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0375	Install 0.5% reactor at Dickerson on the Pleasant View – Dickerson 230 kV circuit	AEC (1.02%) / BGE (25.42%) / DPL (2.97%) / ME (1.72%) / PECO (3.47%) / PEPCO (65.40%)
b0467.1	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.66%) / BGE (22.09%) / ConEd (0.18%) / DPL (3.69%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.53%) / PEPCO (41.78%) / PPL (2.07%)
b0478	Reconductor the four circuits from Burches Hill to Palmers Corner	APS (1.68%) / BGE (1.83%) / PEPCO (96.49%)
b0496	Replace existing 500/230 kV transformer at Brighton	APS (5.67%) / BGE (29.68%) / Dominion (10.91%) / PEPCO (53.74%)
b0499	Install third Burches Hill 500/230 kV transformer	APS (3.54%) / BGE (7.31%) / PEPCO (89.15%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.7	Advance n0772 (Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.8	Advance n0773 (Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.9	Advance n0774 (Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.10	Advance n0775 (Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.11	Advance n0776 (Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.12	Advance n0777 (Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.13	Advance n0778 (Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.14	Advance n0779 (Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.15	Advance n0780 (Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.16	Advance n0781 (Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.17	Advance n0782 (Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.18	Advance n0783 (Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.19	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.20	Advance n0785 (Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.21	Advance n0786 (Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.22	Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.23	Advance n0788 (Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.24	Advance n0789 (Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.25	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.26	Advance n0791 (Replace Chalk Point 230 Kv breaker (4C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.27	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.28	Advance n0793 (Replace Chalk Point 230 Kv breaker (6C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.29	Advance n0794 (Replace Chalk Point 230 Kv breaker (7C) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0526	Build two Ritchie – Benning Station A 230 kV lines	AEC (0.77%) / BGE (16.76%) / DPL (1.22%) / JCPL (1.39%) / ME (0.59%) / Neptune* (0.13%) / PECO (2.10%) / PEPCO (74.86%) / PSEG (2.10%) / RE (0.08%)
b0561	Install 300 MVAR capacitor at Dickerson Station “D” 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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# **Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0562	Install 500 MVAR capacitor at Brighton 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0637	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0638	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0639	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0640	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0641	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0642	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0643	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0644	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0645	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0646	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0647	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0648	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0649	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0701	Expand Benning 230 kV station, add a new 250 MVA 230/69 kV transformer at Benning Station 'A', new 115 kV Benning switching station	BGE (30.57%) / PEPCO (69.43%)
b0702	Add a second 50 MVAR 230 kV shunt reactor at the Benning 230 kV substation	PEPCO (100%)
b0720	Upgrade terminal equipment on both lines	PEPCO (100%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0721	Upgrade Oak Grove – Ritchie 23061 230 kV line	PEPCO (100%)
b0722	Upgrade Oak Grove – Ritchie 23058 230 kV line	PEPCO (100%)
b0723	Upgrade Oak Grove – Ritchie 23059 230 kV line	PEPCO (100%)
b0724	Upgrade Oak Grove – Ritchie 23060 230 kV line	PEPCO (100%)
b0730	Add slow oil circulation to the four Bells Mill Road – Bethesda 138 kV lines, add slow oil circulation to the two Buzzard Point – Southwest 138 kV lines; increasing the thermal ratings of these six lines allows for greater adjustment of the O Street phase shifters	PEPCO (100%)
b0731	Implement an SPS to automatically shed load on the 34 kV Bells Mill Road bus for this N-2 condition. The SPS will be in effect for 2013 and 2014 until a third Bells Mill 230/34 kV is placed in-service in 2015	PEPCO (100%)
b0746	Upgrade circuit for 3,000 amps using the ACCR	AEC (0.73%) / BGE (31.05%) / DPL (1.45%) / PECO (2.46%) / PEPCO (62.88%) / PPL (1.43%)
b0747	Upgrade terminal equipment on both lines: Quince Orchard - Bells Mill 230 kV (030) and (028)	PEPCO (100%)
b0802	Advance n0259 (Replace Dickerson Station H Circuit Breaker 412A)	PEPCO (100%)
b0803	Advance n0260 (Replace Dickerson Station H Circuit Breaker 42A)	PEPCO (100%)
b0804	Advance n0261 (Replace Dickerson Station H Circuit Breaker 42C)	PEPCO (100%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0805 Advance n0262 (Replace Dickerson Station H Circuit Breaker 43A)		PEPCO (100%)
b0806 Advance n0264 (Replace Dickerson Station H Circuit Breaker 44A)		PEPCO (100%)
b0809 Advance n0267 (Replace Dickerson Station H Circuit Breaker 45B)		PEPCO (100%)
b0810 Advance n0270 (Replace Dickerson Station H Circuit Breaker 47A)		PEPCO (100%)
b0811 Advance n0726 (Replace Dickerson Station H Circuit Breaker SPARE )		PEPCO (100%)
b0845 Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker		PEPCO (100%)
b0846 Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker		PEPCO (100%)
b0847 Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker		PEPCO (100%)
b0848 Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker		PEPCO (100%)
b0849 Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker		PEPCO (100%)
b0850 Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker		PEPCO (100%)
b0851 Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker		PEPCO (100%)
b0852 Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker		PEPCO (100%)
b0853 Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker		PEPCO (100%)
b0854 Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker		PEPCO (100%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0855	Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker		PEPCO (100%)
b0856	Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker		PEPCO (100%)
b0857	Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker		PEPCO (100%)
b0858	Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker		PEPCO (100%)
b0859	Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker		PEPCO (100%)
b0860	Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker		PEPCO (100%)
b0861	Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker		PEPCO (100%)
b0862	Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker		PEPCO (100%)
b0863	Replace Chalk Point 230 kV breaker (1C) with 80 kA breaker		PEPCO (100%)
b1104	Replace Burtonsville 230 kV breaker '1C'		PEPCO (100%)
b1105	Replace Burtonsville 230 kV breaker '2C'		PEPCO (100%)
b1106	Replace Burtonsville 230 kV breaker '3C'		PEPCO (100%)
b1107	Replace Burtonsville 230 kV breaker '4C'		PEPCO (100%)
b1125	Convert the 138 kV line from Buzzard 138 - Ritchie 851 to a 230 kV line and Remove 230/138 kV Transformer at Ritchie and install a spare 230/138 kV transformer at Buzzard Pt		APS (4.74%) / PEPCO (95.26%)
b1126	Upgrade the 230 kV line from Buzzard 016 – Ritchie 059		APS (4.74%) / PEPCO (95.26%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1592	Reconductor the Oak Grove – Bowie 230 kV circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1593	Reconductor the Bowie - Burtonsville 230 kV circuit and upgrade terminal equipments at Bowie and Burtonsville 230 kV substations		AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1594	Reconductor the Oak Grove – Bowie 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1595	Reconductor the Bowie – Burtonsville 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Burtonsville 230 kV substations		AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1596	Reconductor the Dickerson station “H” – Quince Orchard 230 kV ‘23032’ circuit and upgrade terminal equipments at Dickerson station “H” and Quince Orchard 230 kV substations		AEC (0.80%) / BGE (33.68%) / DPL (2.09%) / PECO (3.07%) / PEPCO (60.36%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1597	Reconductor the Oak Grove - Aquasco 230 kV '23062' circuit and upgrade terminal equipments at Oak Grove and Aquasco 230 kV substations		AEC (1.44%) / BGE (48.60%) / DPL (2.52%) / PECO (5.00%) / PEPCO (42.44%)
b2008	Reconductor feeder 23032 and 23034 to high temp. conductor (10 miles)		BGE (33.05%) / DPL (1.38%) / PECO (1.35%) / PEPCO (64.22%) /
b2136	Reconductor the Morgantown - V3-017 230 kV '23086' circuit and replace terminal equipments at Morgantown		PEPCO (100%)
b2137	Reconductor the Morgantown - Talbert 230 kV '23085' circuit and replace terminal equipment at Morgantown		PEPCO (100%)
b2138	Replace terminal equipments at Hawkins 230 kV substation		PEPCO (100%)



## SCHEDULE 12 – APPENDIX

### (12) Public Service Electric and Gas Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0025	Convert the Bergen-Leonia 138 Kv circuit to 230 kV circuit.	PSEG (100%)
b0090	Add 150 MVAR capacitor at Camden 230 kV	PSEG (100%)
b0121	Add 150 MVAR capacitor at Aldene 230 kV	PSEG (100%)
b0122	Bypass the Essex 138 kV series reactors	PSEG (100%)
b0125	Add Special Protection Scheme at Bridgewater to automatically open 230 kV breaker for outage of Branchburg – Deans 500 kV and Deans 500/230 kV #1 transformer	PSEG (100%)
b0126	Replace wavetraps on Branchburg – Flagtown 230 kV	PSEG (100%)
b0127	Replace terminal equipment to increase Brunswick – Adams – Bennetts Lane 230 kV to conductor rating	PSEG (100%)
b0129	Replace wavetraps on Flagtown – Somerville 230 kV	PSEG (100%)
b0130	Replace all derated Branchburg 500/230 kV transformers	AEC (1.36%) / ConEd (0.26%) / JCPL (47.63%) / PSEG (50.75%)
b0134	Upgrade or Retension PSEG portion of Kittatinny – Newton 230 kV circuit	JCPL (51.11%) / PSEG (45.96%) / RE (2.93%)

The Annual Revenue Requirement for all Public Service Electric and Gas Company Projects (Required Transmission Enhancements) in this Section 12 shall be as specified in Attachment 7 of Attachment H-10A and under the procedures detailed in Attachment H-10B.

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0145	Build new Essex – Aldene 230 kV cable connected through a phase angle regulator at Essex	PSEG (21.78%) / JCPL (73.45%) / RE (4.77%)
b0157	Add 100MVAR capacitor at West Orange 138kV substation	PSEG (100%)
b0158	Close the Sunnymeade "C" and "F" bus tie	PSEG (100%)
b0159	Make the Bayonne reactor permanent installation	PSEG (100%)
b0160	Relocate the X-2250 circuit from Hudson 1-6 bus to Hudson 7-12 bus	PSEG (100%)
b0161	Install 230/138kV transformer at Metuchen substation	PSEG (99.80%) / RE (0.20%)
b0162	Upgrade the Edison – Meadow Rd 138kV “Q” circuit	PSEG (100%)
b0163	Upgrade the Edison – Meadow Rd 138kV “R” circuit	PSEG (100%)
b0169	Build a new 230 kV section from Branchburg – Flagtown and move the Flagtown – Somerville 230 kV circuit to the new section	AEC (1.70%) / ConEd (1.06%) / JCPL (25.66%) / Neptune* (10.51%) / PSEG (58.96%) / ECP** (2.11%)
b0170	Reconductor the Flagtown-Somerville-Bridgewater 230 kV circuit with 1590 ACSS	JCLP (42.95%) / Neptune* (17.90%) / PSEG (38.36%) RE (0.79%)

\* Neptune Regional Transmission System, LLC

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0172.2	Replace wave trap at Branchburg 500kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)</p>
b0184	Replace Hudson 230kV circuit breakers #1-2	PSEG (100%)
b0185	Replace Deans 230kV circuit breakers #9-10	PSEG (100%)
b0186	Replace Essex 230kV circuit breaker #5-6	PSEG (100%)
b1082	Install 230/138 kV transformer at Bergen substation	PENELEC (16.52%) / PSEG (80.29%) / RE (3.19%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0201	Branchburg substation: replace wave trap on Branchburg – Readington 230 kV circuit		PSEG (100%)
b0213.1	Replace New Freedom 230 kV breaker BS2-6		PSEG (100%)
b0213.3	Replace New Freedom 230 kV breaker BS2-8		PSEG (100%)
b0274	Replace both 230/138 kV transformers at Roseland		ConEd (8.48%) / PSEG (88.56%) / ECP** (2.96%)
b0275	Upgrade the two 138 kV circuits between Roseland and West Orange		PSEG (100%)
b0278	Install 228 MVAR capacitor at Roseland 230 kV substation		PSEG (100%)
b0290	Install 400 MVAR capacitor in the Branchburg 500 kV vicinity		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)
b0358	Reconductor the PSEG portion of Buckingham – Pleasant Valley 230 kV, replace wave trap and metering transformer		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0368	Reconductor Tosco – G22_MTX 230 kV circuit with 1033 bundled ACSS		PSEG (100%)
b0371	Make the Metuchen 138 kV bus solid and upgrade 6 breakers at the Metuchen substation		PSEG (100%)
b0372	Make the Athenia 138 kV bus solid and upgrade 2 breakers at the Athenia substation		PSEG (100%)
b0395	Replace Hudson 230 kV breaker BS4-5		PSEG (100%)
b0396	Replace Hudson 230 kV breaker BS1-6		PSEG (100%)
b0397	Replace Hudson 230 kV breaker BS3-4		PSEG (100%)
b0398	Replace Hudson 230 kV breaker BS5-6		PSEG (100%)
b0401.1	Replace Roseland 230 kV breaker BS6-7		PSEG (100%)
b0401.2	Replace Roseland 138 kV breaker O-1315		PSEG (100%)
b0401.3	Replace Roseland 138 kV breaker S-1319		PSEG (100%)
b0401.4	Replace Roseland 138 kV breaker T-1320		PSEG (100%)
b0401.5	Replace Roseland 138 kV breaker G-1307		PSEG (100%)
b0401.6	Replace Roseland 138 kV breaker P-1316		PSEG (100%)
b0401.7	Replace Roseland 138 kV breaker 220-4		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0401.8	Replace W. Orange 138 kV breaker 132-4	PSEG (100%)
b0411	Install 4 <sup>th</sup> 500/230 kV transformer at New Freedom	AEC (47.01%) / JCPL (7.04%) / Neptune* (0.28%) / PECO (23.36%) / PSEG (22.31%)
b0423	Reconductor Readington (2555) – Branchburg (4962) 230 kV circuit w/1590 ACSS	PSEG (100%)
b0424	Replace Readington wavetrap on Readington (2555) – Roseland (5017) 230 kV circuit	PSEG (100%)
b0425	Reconductor Linden (4996) – Tosco (5190) 230 kV circuit w/1590 ACSS (Assumes operating at 220 degrees C)	PSEG (100%)
b0426	Reconductor Tosco (5190) – G22_MTX5 (90220) 230 kV circuit w/1590 ACSS (Assumes operation at 220 degrees C)	PSEG (100%)
b0427	Reconductor Athenia (4954) – Saddle Brook (5020) 230 kV circuit river section	PSEG (100%)
b0428	Replace Roseland wavetrap on Roseland (5019) – West Caldwell “G” (5089) 138 kV circuit	PSEG (100%)
b0429	Reconductor Kittatinny (2553) – Newton (2535) 230 kV circuit w/1590 ACSS	JCPL (41.91%) / Neptune* (3.59%) / PSEG (50.59%) / RE (2.23%) / ECP** (1.68%)
b0439	Spare Deans 500/230 kV transformer	PSEG (100%)
b0446.1	Upgrade Bayway 138 kV breaker #2-3	PSEG (100%)
b0446.2	Upgrade Bayway 138 kV breaker #3-4	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0446.3	Upgrade Bayway 138 kV breaker #6-7	PSEG (100%)
b0446.4	Upgrade the breaker associated with TX 132-5 on Linden 138 kV	PSEG (100%)
b0470	Install 138 kV breaker at Roseland and close the Roseland 138 kV buses	PSEG (100%)
b0471	Replace the wave traps at both Lawrence and Pleasant Valley on the Lawrence – Pleasant Vallen 230 kV circuit	PSEG (100%)
b0472	Increase the emergency rating of Saddle Brook – Athenia 230 kV by 25% by adding forced cooling	ConEd (1.64%) / ECP (2.03%) / PSEG (92.86%) / RE (3.47%)
b0473	Move the 150 MVAR mobile capacitor from Aldene 230 kV to Lawrence 230 kV substation	PSEG (100%)
b0489	Build new 500 kV transmission facilities from Pennsylvania – New Jersey border at Bushkill to Roseland	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)†
		<b>DFAX Allocation:</b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)
b489.1	Replace Athenia 230 kV breaker 31H	PSEG (100%)

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† Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

†† Cost allocations associated with below 500 kV elements of the project

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b489.2	Replace Bergen 230 kV breaker 10H		PSEG (100%)
b489.3	Replace Saddlebrook 230 kV breaker 21P		PSEG (100%)
b0489.4	Install two Roseland 500/230 kV transformers as part of the Susquehanna – Roseland 500 kV project		AEC (5.07%) / ComEd (0.29%) / ConEd (0.48%) / Dayton (0.03%) / DPL (1.75%) / JCPL (32.57%) / Neptune* (6.29%) / PECO (9.99%) / PENELEC (0.56%) / ECP** (0.95%) / PSEG (40.51%) / RE (1.51%) ††
b0489.5	Replace Roseland 230 kV breaker '42H' with 80 kA		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)
b0489.6	Replace Roseland 230 kV breaker '51H' with 80 kA		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)

\* Neptune Regional Transmission System, LLC

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.7	Replace Roseland 230 kV breaker '71H' with 80 kA	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</p>
b0489.8	Replace Roseland 230 kV breaker '31H' with 80 kA	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.9	Replace Roseland 230 kV breaker '11H' with 80 kA	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)
b0489.10	Replace Roseland 230 kV breaker '21H'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.11	Replace Roseland 230 kV breaker '32H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</p>
b0489.12	Replace Roseland 230 kV breaker '12H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)</p>

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\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0489.13	Replace Roseland 230 kV breaker '52H'		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd  (13.35%) / ConEd (0.57%) /  Dayton (2.11%) / DEOK  (3.35%) / DL (1.76%) / DPL  (2.60%) / Dominion (12.32%) /  EKPC (1.82%) / HTP***  (0.20%) / JCPL (3.76%) / ME  (1.86%) / NEPTUNE* (0.42%)  / PECO (5.27%) / PENELEC  (1.84%) / PEPCO (4.15%) /  PPL (4.43%) / PSEG (6.18%) /  RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) /  JCPL (35.20%) / NEPTUNE  (3.38%) / PSEG (52.66%) / RE  (2.11%)</p>
b0489.14	Replace Roseland 230 kV breaker '41H'		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd  (13.35%) / ConEd (0.57%) /  Dayton (2.11%) / DEOK  (3.35%) / DL (1.76%) / DPL  (2.60%) / Dominion (12.32%) /  EKPC (1.82%) / HTP***  (0.20%) / JCPL (3.76%) / ME  (1.86%) / NEPTUNE* (0.42%)  / PECO (5.27%) / PENELEC  (1.84%) / PEPCO (4.15%) /  PPL (4.43%) / PSEG (6.18%) /  RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) /  JCPL (35.20%) / NEPTUNE  (3.38%) / PSEG (52.66%) / RE  (2.11%)</p>

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.15	Replace Roseland 230 kV breaker '72H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd  (13.35%) / ConEd (0.57%) /  Dayton (2.11%) / DEOK  (3.35%) / DL (1.76%) / DPL  (2.60%) / Dominion (12.32%) /  EKPC (1.82%) / HTP***  (0.20%) / JCPL (3.76%) / ME  (1.86%) / NEPTUNE* (0.42%)  / PECO (5.27%) / PENELEC  (1.84%) / PEPCO (4.15%) /  PPL (4.43%) / PSEG (6.18%) /  RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) /  JCPL (35.20%) / NEPTUNE  (3.38%) / PSEG (52.66%) / RE  (2.11%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0498	Loop the 5021 circuit into New Freedom 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (15.37%) / ECP (1.25%) / HTP (1.05%) / JCPL (28.13%) / NEPTUNE (3.27%) / PSEG (48.97%) / RE (1.96%)</p>
b0498.1	Upgrade the 20H circuit breaker	PSEG (100%)
b0498.2	Upgrade the 22H circuit breaker	PSEG (100%)
b0498.3	Upgrade the 30H circuit breaker	PSEG (100%)
b0498.4	Upgrade the 32H circuit breaker	PSEG (100%)
b0498.5	Upgrade the 40H circuit breaker	PSEG (100%)
b0498.6	Upgrade the 42H circuit breaker	PSEG (100%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0565	Install 100 MVAR capacitor at Cox's Corner 230 kV substation		PSEG (100%)
b0578	Replace Essex 138 kV breaker 4LM (C1355 line to ECRRF)		PSEG (100%)
b0579	Replace Essex 138 kV breaker 1LM (220-1 TX)		PSEG (100%)
b0580	Replace Essex 138 kV breaker 1BM (BS1-3 tie)		PSEG (100%)
b0581	Replace Essex 138 kV breaker 2BM (BS3-4 tie)		PSEG (100%)
b0582	Replace Linden 138 kV breaker 3 (132-7 TX)		PSEG (100%)
b0592	Replace Metuchen 138 kV breaker '2-2 Transfer'		PSEG (100%)
b0664	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0665	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0668	Reconductor with 2x1033 ACSS conductor		JCPL (39.41%) / NEPTUNE* (20.38%) / PSEG (38.76%) / RE (1.45%)
b0671	Replace terminal equipment at both ends of line		PSEG (100%)
b0743	Add a bus tie breaker at Roseland 138 kV		PSEG (100%)
b0812	Increase operating temperature on line for one year to get 925E MVA rating		PSEG (100%)
b0813	Reconductor Hudson – South Waterfront 230 kV circuit		BGE (1.25%) / JCPL (9.92%) / NEPTUNE* (0.87%) / PEPSCO (1.11%) / PSEG (83.73%) / RE (3.12%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0814	New Essex – Kearney 138 kV circuit and Kearney 138 kV bus tie		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.1	Replace Kearny 138 kV breaker '1-SHT' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.2	Replace Kearny 138 kV breaker '15HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.3	Replace Kearny 138 kV breaker '14HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.4	Replace Kearny 138 kV breaker '10HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.5	Replace Kearny 138 kV breaker '2HT' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.6	Replace Kearny 138 kV breaker '22HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.7	Replace Kearny 138 kV breaker '4HT' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.8	Replace Kearny 138 kV breaker '25HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.9	Replace Essex 138 kV breaker '2LM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.10	Replace Essex 138 kV breaker '1BT' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.11	Replace Essex 138 kV breaker '2PM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.12	Replace Marion 138 kV breaker '2HM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.13	Replace Marion 138 kV breaker '2LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.14	Replace Marion 138 kV breaker '1LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.15	Replace Marion 138 kV breaker '6PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.16	Replace Marion 138 kV breaker '3PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.17	Replace Marion 138 kV breaker '4LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0814.18	Replace Marion 138 kV breaker '3LM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.19	Replace Marion 138 kV breaker '1HM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.20	Replace Marion 138 kV breaker '2PM3' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.21	Replace Marion 138 kV breaker '2PM1' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.22	Replace ECRR 138 kV breaker '903'		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.23	Replace Foundry 138 kV breaker '21P'		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.24	Change the contact parting time on Essex 138 kV breaker '3LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.25	Change the contact parting time on Essex 138 kV breaker '2BM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0814.26	Change the contact parting time on Essex 138 kV breaker '1BM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.27	Change the contact parting time on Essex 138 kV breaker '3PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.28	Change the contact parting time on Essex 138 kV breaker '4LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.29	Change the contact parting time on Essex 138 kV breaker '1PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.30	Change the contact parting time on Essex 138 kV breaker '1LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0829	Build Branchburg to Roseland 500 kV circuit as part of Branchburg – Hudson 500 kV project	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0829.6	Replace Branchburg 500 kV breaker 91X	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> PSEG (96.14%) / RE (3.86%)
b0829.9	Replace Branchburg 230 kV breaker 102H	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0829.11	Replace Branchburg 230 kV breaker 32H		PSEG (100%)
b0829.12	Replace Branchburg 230 kV breaker 52H		PSEG (100%)
b0830	Build Roseland - Hudson 500 kV circuit as part of Branchburg – Hudson 500 kV project		AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0830.1	Replace Roseland 230 kV breaker '82H' with 80 kA		PSEG (100%)
b0830.2	Replace Roseland 230 kV breaker '91H' with 80 kA		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0830.3	Replace Roseland 230 kV breaker '22H' with 80 kA		PSEG (100%)
b0831	Replace 138/13 kV transformers with 230/13 kV units as part of Branchburg – Hudson 500 kV project		ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0832	Build Hudson 500 kV switching station as part of Branchburg – Hudson 500 kV project		AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0833	Build Roseland 500 kV switching station as part of Branchburg – Hudson 500 kV project		AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0834	Convert the E-1305/F-1306 to one 230 kV circuit as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0835	Build Hudson 230 kV transmission lines as part of Roseland – Hudson 500 kV project as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0836	Install transformation at new Hudson 500 kV switching station and perform Hudson 230 kV and 345 kV station work as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0882	Replace Hudson 230 kV breaker 1HA with 80 kA	PSEG (100%)
b0883	Replace Hudson 230 kV breaker 2HA with 80 kA	PSEG (100%)
b0884	Replace Hudson 230 kV breaker 3HB with 80 kA	PSEG (100%)
b0885	Replace Hudson 230 kV breaker 4HA with 80 kA	PSEG (100%)
b0886	Replace Hudson 230 kV breaker 4HB with 80 kA	PSEG (100%)
b0889	Replace Bergen 230 kV breaker '21H'	PSEG (100%)
b0890	Upgrade New Freedom 230 kV breaker '21H'	PSEG (100%)
b0891	Upgrade New Freedom 230 kV breaker '31H'	PSEG (100%)
b0899	Replace ECRR 138 kV breaker 901	PSEG (100%)
b0900	Replace ECRR 138 kV breaker 902	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1013	Replace Linden 138 kV breaker '7PB'		PSEG (100%)
b1017	Reconductor South Mahwah - Waldwick 345 kV J-3410 circuit		ConEd (49.36%) / JCPL (14.69%) / NEPTUNE* (1.39%) / PSEG (32.84%) / RE (1.28%) / ECP** (0.44%)
b1018	Reconductor South Mahwah - Waldwick 345 kV K-3411 circuit		ConEd (49.38%) / JCPL (14.77%) / NEPTUNE* (1.39%) / PSEG (32.74%) / RE (1.28%) / ECP** (0.44%)
b1019.1	Replace wave trap, line disconnect and ground switch at Roseland on the F-2206 circuit		PSEG (100%)
b1019.2	Replace wave trap, line disconnect and ground switch at Roseland on the B-2258 circuit		PSEG (100%)
b1019.3	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.4	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the B-2258 circuit		PSEG (100%)
b1019.5	Replace wave trap, line disconnect and ground switch at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.6	Replace line disconnect and ground switch at Cedar Grove on the K-2263 circuit		PSEG (100%)
b1019.7	Replace 2-4 and 4-5 section disconnect and ground switches at Clifton on the B-2258 circuit		PSEG (100%)
b1019.8	Replace 1-2 and 2-3 section disconnect and ground switches at Clifton on the K-2263 circuit		PSEG (100%)



**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1019.9	Replace line, ground, 230 kV main bus disconnects at Athenia on the B-2258 circuit		PSEG (100%)
b1019.10	Replace wave trap, line, ground 230 kV breaker disconnect and 230 kV main bus disconnects at Athenia on the K-2263 circuit		PSEG (100%)
b1082.1	Replace Bergen 138 kV breaker '30P' with 80 kA		PSEG (100%)
b1082.2	Replace Bergen 138 kV breaker '80P' with 80 kA		PSEG (100%)
b1082.3	Replace Bergen 138 kV breaker '70P' with 80 kA		PSEG (100%)
b1082.4	Replace Bergen 138 kV breaker '90P' with 63 kA		PSEG (100%)
b1082.5	Replace Bergen 138 kV breaker '50P' with 63 kA		PSEG (100%)
b1082.6	Replace Bergen 230 kV breaker '12H' with 80 kA		PSEG (100%)
b1082.7	Replace Bergen 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1082.8	Replace Bergen 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1082.9	Replace Bergen 230 kV breaker '20H' with 80 kA		PSEG (100%)
b1098	Re-configure the Bayway 138 kV substation and install three new 138 kV breakers		PSEG (100%)
b1099	Build a new 230 kV substation by tapping the Aldene – Essex circuit and install three 230/26 kV transformers, and serve some of the Newark area load from the new station		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1100	Build a new 138 kV circuit from Bayonne to Marion		PSEG (100%)
b1101	Re-configure the Cedar Grove substation with breaker and half scheme and build a new 69 kV circuit from Cedar Grove to Hinchman		PSEG (100%)
b1154	Convert the West Orange 138 kV substation, the two Roseland – West Orange 138 kV circuits, and the Roseland – Sewaren 138 kV circuit from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1155	Build a new 230 kV circuit from Branchburg to Middlesex Sw. Rack. Build a new 230 kV substation at Middlesex		JCPL (4.61%) / PSEG (91.75%) / RE (3.64%)
b1155.3	Replace Branchburg 230 kV breaker '81H' with 63 kA		PSEG (100%)
b1155.4	Replace Branchburg 230 kV breaker '72H' with 63 kA		PSEG (100%)
b1155.5	Replace Branchburg 230 kV breaker '61H' with 63 kA		PSEG (100%)
b1155.6	Replace Branchburg 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156	Convert the Burlington, Camden, and Cuthbert Blvd 138 kV substations, the 138 kV circuits from Burlington to Camden, and the 138 kV circuit from Camden to Cuthbert Blvd. from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1156.13	Replace Camden 230 kV breaker '22H' with 80 kA		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1156.14	Replace Camden 230 kV breaker '32H' with 80 kA		PSEG (100%)
b1156.15	Replace Camden 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1156.16	Replace New Freedom 230 kV breaker '50H' with 63 kA		PSEG (100%)
b1156.17	Replace New Freedom 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156.18	Replace New Freedom 230 kV breaker '51H' with 63 kA		PSEG (100%)
b1156.19	Rebuild Camden 230 kV to 80 kA		PSEG (100%)
b1156.20	Rebuild Burlington 230 kV to 80 kA		PSEG (100%)
b1197.1	Reconductor the PSEG portion of the Burlington – Croydon circuit with 1590 ACSS		PSEG (100%)
b1228	Re-configure the Lawrence 230 kV substation to breaker and half		HTP (0.14%) / ECP (0.22%) / PSEG (95.83%) / RE (3.81%)
b1255	Build a new 69 kV substation (Ridge Road) and build new 69 kV circuits from Montgomery – Ridge Road – Penns Neck/Dow Jones		PSEG (96.18%) / RE (3.82%)
b1304.1	Convert the existing 'D1304' and 'G1307' 138 kV circuits between Roseland – Kearny – Hudson to 230 kV operation		AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1304.2	Expand existing Bergen 230 kV substation and reconfigure the Athenia 230 kV substation to breaker and a half scheme	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.3	Build second 230 kV underground cable from Bergen to Athenia	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.4	Build second 230 kV underground cable from Hudson to South Waterfront	AEC (0.21%) / BGE (0.88%) / ComEd (2.11%) / ConEd (9.05%) / Dayton (0.12%) / JCPL (1.06%) / Neptune (0.06%) / HTP (14.60%) / PENELEC (2.70%) / PEPCO (0.95%) / ECP (1.92%) / PSEG (63.81%) / RE (2.53%)
b1304.5	Replace Athenia 230 kV breaker '21H' with 80 kA	PSEG (100%)
b1304.6	Replace Athenia 230 kV breaker '41H' with 80 kA	PSEG (100%)
b1304.7	Replace South Waterfront 230 kV breaker '12H' with 80 kA	PSEG (100%)
b1304.8	Replace South Waterfront 230 kV breaker '22H' with 80 kA	PSEG (100%)
b1304.9	Replace South Waterfront 230 kV breaker '32H' with 80 kA	PSEG (100%)
b1304.10	Replace South Waterfront 230 kV breaker '52H' with 80 kA	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.11	Replace South Waterfront 230 kV breaker '62H' with 80 kA		PSEG (100%)
b1304.12	Replace South Waterfront 230 kV breaker '72H' with 80 kA		PSEG (100%)
b1304.13	Replace South Waterfront 230 kV breaker '82H' with 80 kA		PSEG (100%)
b1304.14	Replace Essex 230 kV breaker '20H' with 80 kA		PSEG (100%)
b1304.15	Replace Essex 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.16	Replace Essex 230 kV breaker '10H' with 80 kA		PSEG (100%)
b1304.17	Replace Essex 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1304.18	Replace Essex 230 kV breaker '11HL' with 80 kA		PSEG (100%)
b1304.19	Replace Newport R 230 kV breaker '23H' with 63 kA		PSEG (100%)
b1304.20	Rebuild Athenia 230 kV substation to 80 kA		PSEG (100%)
b1304.21	Rebuild Bergen 230 kV substation to 80 kA		PSEG (100%)
b1398	Build two new parallel underground circuits from Gloucester to Camden		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.1	Install shunt reactor at Gloucester to offset cable charging		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.2	Reconfigure the Cuthbert station to breaker and a half scheme	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.3	Build a second 230 kV parallel overhead circuit from Mickelton – Gloucester	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.4	Reconductor the existing Mickleton – Gloucester 230 kV circuit (PSEG portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.7	Reconductor the Camden – Richmond 230 kV circuit (PSEG portion) and upgrade terminal equipments at Camden substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.15	Replace Gloucester 230 kV breaker '21H' with 63 kA	PSEG (100%)
b1398.16	Replace Gloucester 230 kV breaker '51H' with 63 kA	PSEG (100%)
b1398.17	Replace Gloucester 230 kV breaker '56H' with 63 kA	PSEG (100%)
b1398.18	Replace Gloucester 230 kV breaker '26H' with 63 kA	PSEG (100%)
b1398.19	Replace Gloucester 230 kV breaker '71H' with 63 kA	PSEG (100%)
b1399	Convert the 138 kV path from Aldene – Springfield Rd. – West Orange to 230 kV	PSEG (96.18%) / RE (3.82%)
b1400	Install 230 kV circuit breakers at Bennetts Ln. “F” and “X” buses	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1410	Replace Salem 500 kV breaker '11X'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> PSEG (96.14%) / RE (3.86%)
b1411	Replace Salem 500 kV breaker '12X'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> PSEG (96.14%) / RE (3.86%)
b1412	Replace Salem 500 kV breaker '20X'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> PSEG (96.14%) / RE (3.86%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1413	Replace Salem 500 kV breaker '21X'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> PSEG (96.14%) / RE (3.86%)
b1414	Replace Salem 500 kV breaker '31X'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> PSEG (96.14%) / RE (3.86%)
b1415	Replace Salem 500 kV breaker '32X'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> PSEG (96.14%) / RE (3.86%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1539	Replace Tosco 230 kV breaker 'CB1' with 63 kA		PSEG (100%)
b1540	Replace Tosco 230 kV breaker 'CB2' with 63 kA		PSEG (100%)
b1541	Open the Hudson 230 kV bus tie		PSEG (100%)
b1588	Reconductor the Eagle Point - Gloucester 230 kV circuit #1 and #2 with higher conductor rating		JCPL (10.31%) / Neptune* (0.98%) / HTP (0.75%) / PECO (30.81%) / ECP** (0.82%) / PSEG (54.17%) / RE (2.16%)
b1589	Re-configure the Kearny 230 kV substation and loop the P-2216-1 (Essex - NJT Meadows) 230 kV circuit		ATSI (8.00%) / HTP (20.18%) / PENELEC (7.77%) / PSEG (61.59%) / RE (2.46%)
b1590	Upgrade the PSEG portion of the Camden Richmond 230 kV circuit to six wire conductor and replace terminal equipment at Camden		BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPCO (1.93%) / PPL (2.46%) / ECP** (0.16%)
b1749	Advance n1237 (Replace Essex 230 kV breaker '22H' with 80kA)		PSEG (100%)
b1750	Advance n0666.5 (Replace Hudson 230 kV breaker '1HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1751	Advance n0666.3 (Replace Hudson 230 kV breaker '2HA' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1752	Advance n0666.10 (Replace Hudson 230 kV breaker '2HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1753	Marion 138 kV breaker '7PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1754	Marion 138 kV breaker '3PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1755	Marion 138 kV breaker '6PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1787	Build a second 230 kV circuit from Cox's Corner - Lumberton	AEC (4.96%) / JCPL (44.20%) / NEPTUNE* (0.53%) / HTP (0.15%) / ECP** (0.16%) / PSEG (48.08%) / RE (1.92%)
b2034	Install a reactor along the Kearny - Essex 138 kV line	PSEG (100%)
b2035	Replace Sewaren 138 kV breaker '11P'	PSEG (100%)
b2036	Replace Sewaren 138 kV breaker '21P'	PSEG (100%)
b2037	Replace PVSC 138 kV breaker '452'	PSEG (100%)
b2038	Replace PVSC 138 kV breaker '552'	PSEG (100%)
b2039	Replace Bayonne 138 kV breaker '11P'	PSEG (100%)
b2139	Reconductor the Mickleton - Gloucester 230 kV parallel circuits with double bundle conductor	PSEG (61.11%) / PECO (36.45%) / RE (2.44%)
b2146	Re-configure the Brunswick 230 kV and 69 kV substations	PSEG (96.16%) / RE (3.84%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2151	Construct Jackson Rd. 69 kV substation and loop the Cedar Grove - Hinchmans Ave into Jackson Rd. and construct Hawthorne 69 kV substation and build 69 kV circuit from Hinchmans Ave - Hawthorne - Fair Lawn		PSEG (100%)
b2159	Reconfigure the Linden, Bayway, North Ave, and Passaic Valley S.C. 138 kV substations. Construct and loop new 138 kV circuit to new airport station		PSEG (72.61%) / HTP (24.49%) / RE (2.90%)

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## SCHEDULE 12 – APPENDIX

### (14) Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0216	Install -100/+525 MVAR dynamic reactive device at Black Oak	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (48.02%) / BGE (8.00%) / Dominion (28.85%) / PEPCO (15.13%)
b0218	Install third Wylie Ridge 500/345kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0220	Upgrade coolers on Wylie Ridge 500/345 kV #7	
b0229	Install fourth Bedington 500/138 kV	
b0230	Install fourth Meadowbrook 500/138 kV	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		AEC (11.62%) / ConEd (1.79%) / DPL (19.05%) / Dominion (13.56%) / JCPL (15.28%) / PECO (38.70%)
		AEC (11.62%) / ConEd (1.79%) / DPL (19.05%) / Dominion (13.56%) / JCPL (15.28%) / PECO (38.70%)
		APS (50.98%) / BGE (13.42%) / DPL (2.03%) / Dominion (14.50%) / ME (1.43%) / PEPCO (17.64%)
		APS (79.16%) / BGE (3.61%) / DPL (0.86%) / Dominion (11.75%) / ME (0.67%) / PEPCO (3.95%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0238	Reconductor Doubs – Dickerson and Doubs – Aqueduct 1200 MVA	As specified under the procedures detailed in Attachment H-18B, Section 1.b	BGE (16.66%) / Dominion (33.66%) / PEPCO (49.68%)
b0240	Open the Black Oak #3 500/138 kV transformer for the loss of Hatfield – Back Oak 500 kV line		APS (100%)
b0245	Replacement of the existing 954 ACSR conductor on the Bedington – Nipetown 138 kV line with high temperature/low sag conductor		APS (100%)
b0246	Rebuild of the Double Tollgate – Old Chapel 138 kV line with 954 ACSR conductor	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)
b0273	Open both North Shenandoah #3 transformer and Strasburg – Edinburgh 138 kV line for the loss of Mount Storm – Meadowbrook 572 500 kV		APS (100%)
b0322	Convert Lime Kiln substation to 230 kV operation		APS (100%)
b0323	Replace the North Shenandoah 138/115 kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)

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†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.2	Build new Meadow Brook – Loudoun 500 kV circuit (20 of 50 miles)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (88.62%) / PEPCO (11.38%)</p>
b0343	Replace Doubs 500/230 kV transformer #2	As specified under the procedures detailed in Attachment H-18B, Section 1.b AEC (1.85%) / BGE (21.49%) / DPL (3.91%) / Dominion (28.86%) / ME (2.97%) / PECO (5.73%) / PEPCO (35.19%)
b0344	Replace Doubs 500/230 kV transformer #3	As specified under the procedures detailed in Attachment H-18B, Section 1.b AEC (1.86%) / BGE (21.50%) / DPL (3.91%) / Dominion (28.82%) / ME (2.97%) / PECO (5.74%) / PEPCO (35.20%)
b0345	Replace Doubs 500/230 kV transformer #4	As specified under the procedures detailed in Attachment H-18B, Section 1.b AEC (1.85%) / BGE (21.49%) / DPL (3.90%) / Dominion (28.83%) / ME (2.98%) / PECO (5.75%) / PEPCO (35.20%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.1	Build new Mt. Storm – 502 Junction 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (62.13%) / PEPCO (37.87%)
b0347.2	Build new Mt. Storm – Meadow Brook 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.3	Build new 502 Junction 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.4	Upgrade Meadow Brook 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.5	Replace Harrison 500 kV breaker HL-3	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%)  / ConEd (0.57%) / Dayton  (2.11%) / DEOK (3.35%) / DL  (1.76%) / DPL (2.60%) /  Dominion (12.32%) / EKPC  (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>
b0347.6	Upgrade (per ABB inspection) breaker HL-6	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%)  / ConEd (0.57%) / Dayton  (2.11%) / DEOK (3.35%) / DL  (1.76%) / DPL (2.60%) /  Dominion (12.32%) / EKPC  (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.7	Upgrade (per ABB inspection) breaker HL-7	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%)  / ConEd (0.57%) / Dayton  (2.11%) / DEOK (3.35%) / DL  (1.76%) / DPL (2.60%) /  Dominion (12.32%) / EKPC  (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>
b0347.8	Upgrade (per ABB inspection) breaker HL-8	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%)  / ConEd (0.57%) / Dayton  (2.11%) / DEOK (3.35%) / DL  (1.76%) / DPL (2.60%) /  Dominion (12.32%) / EKPC  (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.9	Upgrade (per ABB inspection) breaker HL-10	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (62.13%) / PEPCO (37.87%)
b0347.10	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-1	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (62.13%) / PEPCO (37.87%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.11	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-3	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (62.13%) / PEPCO (37.87%)
b0347.12	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-4	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (62.13%) / PEPCO (37.87%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.13	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-6	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>
b0347.14	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-7	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.15	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-9	<p><b>Load-Ratio Share Allocation:</b>            (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>            APS (62.13%) / PEPCO (37.87%)</p>
b0347.16	Upgrade (per ABB inspection) Harrison 500 kV breaker 'HL-3'	<p><b>Load-Ratio Share Allocation:</b>            AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>            APS (62.13%) / PEPCO (37.87%)</p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.17	Replace Meadow Brook 138 kV breaker 'MD-10'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0347.18	Replace Meadow Brook 138 kV breaker 'MD-11'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.19	Replace Meadow Brook 138 kV breaker 'MD-12'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0347.20	Replace Meadow Brook 138 kV breaker 'MD-13'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.21	Replace Meadow Brook 138 kV breaker 'MD-14'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0347.22	Replace Meadow Brook 138 kV breaker 'MD-15'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.23	Replace Meadow Brook 138 kV breaker 'MD-16'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0347.24	Replace Meadow Brook 138 kV breaker 'MD-17'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.25	Replace Meadow Brook 138 kV breaker 'MD-18'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0347.26	Replace Meadow Brook 138 kV breaker 'MD-22#1 CAP'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.27	Replace Meadow Brook 138 kV breaker 'MD-4'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0347.28	Replace Meadow Brook 138 kV breaker 'MD-5'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.29	Replace Meadowbrook 138 kV breaker 'MD-6'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.30	Replace Meadowbrook 138 kV breaker 'MD-7'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%)  / ConEd (0.57%) / Dayton  (2.11%) / DEOK (3.35%) / DL  (1.76%) / DPL (2.60%) /  Dominion (12.32%) / EKPC  (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%)  / PEPCO (13.58%)</p>
b0347.31	Replace Meadowbrook 138 kV breaker 'MD-8'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%)  / ConEd (0.57%) / Dayton  (2.11%) / DEOK (3.35%) / DL  (1.76%) / DPL (2.60%) /  Dominion (12.32%) / EKPC  (1.82%) / HTP*** (0.20%) /  JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%)  / PEPCO (13.58%)</p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.32	Replace Meadowbrook 138 kV breaker 'MD-9'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion  (12.32%) / EKPC (1.82%) /  HTP*** (0.20%) / JCPL (3.76%) /  ME (1.86%) / NEPTUNE*  (0.42%) / PECO (5.27%) /  PENELEC (1.84%) / PEPCO  (4.15%) / PPL (4.43%) / PSEG  (6.18%) / RE (0.25%) / ECP**  (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%) /  PEPCO (13.58%)</p>
b0347.33	Replace Meadow Brook 138kV breaker 'MD-1'	APS (100%)
b0347.34	Replace Meadow Brook 138kV breaker 'MD-2'	APS (100%)
b0348	Upgrade Stonewall – Inwood 138 kV with 954 ACSR conductor	APS (100%)
b0373	Convert Doubs – Monocacy 138 kV facilities to 230 kV operation	AEC (1.82%) / APS (76.84%) / DPL (2.64%) / JCPL (4.53%) / ME (9.15%) / Neptune* (0.42%) / PPL (4.60%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0393	Replace terminal equipment at Harrison 500 kV and Belmont 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ATSI (33.81%) / Dayton (14.78%) /  DEOK (44.45%) / EKPC (6.96%)</p>



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0406.1	Replace Mitchell 138 kV breaker “#4 bank”		APS (100%)
b0406.2	Replace Mitchell 138 kV breaker “#5 bank”		APS (100%)
b0406.3	Replace Mitchell 138 kV breaker “#2 transf”		APS (100%)
b0406.4	Replace Mitchell 138 kV breaker “#3 bank”		APS (100%)
b0406.5	Replace Mitchell 138 kV breaker “Charlerio #2”		APS (100%)
b0406.6	Replace Mitchell 138 kV breaker “Charlerio #1”		APS (100%)
b0406.7	Replace Mitchell 138 kV breaker “Shepler Hill Jct”		APS (100%)
b0406.8	Replace Mitchell 138 kV breaker “Union Jct”		APS (100%)
b0406.9	Replace Mitchell 138 kV breaker “#1-2 138 kV bus tie”		APS (100%)
b0407.1	Replace Marlowe 138 kV breaker “#1 transf”		APS (100%)
b0407.2	Replace Marlowe 138 kV breaker “MBO”		APS (100%)
b0407.3	Replace Marlowe 138 kV breaker “BMA”		APS (100%)
b0407.4	Replace Marlowe 138 kV breaker “BMR”		APS (100%)
b0407.5	Replace Marlowe 138 kV breaker “WC-1”		APS (100%)

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\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0407.6	Replace Marlowe 138 kV breaker “R11”		APS (100%)
b0407.7	Replace Marlowe 138 kV breaker “W”		APS (100%)
b0407.8	Replace Marlowe 138 kV breaker “138 kV bus tie”		APS (100%)
b0408.1	Replace Trissler 138 kV breaker “Belmont 604”		APS (100%)
b0408.2	Replace Trissler 138 kV breaker “Edgelawn 90”		APS (100%)
b0409.1	Replace Weirton 138 kV breaker “Wylie Ridge 210”		APS (100%)
b0409.2	Replace Weirton 138 kV breaker “Wylie Ridge 216”		APS (100%)
b0410	Replace Glen Falls 138 kV breaker “McAlpin 30”		APS (100%)
b0417	Reconductor Mitchell – Shepler Hill Junction 138kV with 954 ACSR		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0418	Install a breaker failure auto-restoration scheme at Cabot 500 kV for the failure of the #6 breaker	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0419	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers	<div> <b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%) </div> <div> <b>DFAX Allocation:</b>  APS (100%) </div>
b0420	Operating Procedure to open the Black Oak 500/138 kV transformer #3 for the loss of Hatfield – Ronco 500 kV and the Hatfield #3 Generation	APS (100%)
b0445	Upgrade substation equipment and reconductor the Tidd – Mahans Lane – Weirton 138kV circuit with 954 ACSR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0460	Raise limiting structures on Albright – Bethelboro 138 kV to raise the rating to 175 MVA normal 214 MVA emergency		APS (100%)
b0491	Construct an Amos to Welton Spring to WV state line 765 kV circuit (APS equipment)	As specified under the procedures detailed in Attachment H-19B	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492	Construct a Welton Spring to Kemptown 765 kV line (APS equipment)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>
b0492.3	Replace Eastalco 230 kV breaker D-26	APS (100%)
b0492.4	Replace Eastalco 230 kV breaker D-28	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.5	Replace Eastalco 230 kV breaker D-31	APS (100%)
b0495	Replace existing Kammer 765/500 kV transformer with a new larger transformer	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (0.73%) / BGE (43.42%) / Dayton (0.67%) / DEOK (1.42%) / EKPC (0.22%) / PEPCO (53.54%)</p>
b0533	Reconductor the Powell Mountain – Sutton 138 kV line	APS (100%)
b0534	Install a 28.61 MVAR capacitor on Sutton 138 kV	APS (100%)
b0535	Install a 44 MVAR capacitor on Dutch Fork 138 kV	APS (100%)
b0536	Replace Doubs circuit breaker DJ1	APS (100%)
b0537	Replace Doubs circuit breaker DJ7	APS (100%)
b0538	Replace Doubs circuit breaker DJ10	APS (100%)
b0572.1	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0572.2	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)
b0573	Reconfigure circuits in Butler – Cabot 138 kV area	APS (100%)
b0577	Replace Fort Martin 500 kV breaker FL-1	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (100%)</p>
b0584	Install 33 MVAR 138 kV capacitor at Necessity 138 kV	APS (100%)
b0585	Increase Cecil 138 kV capacitor size to 44 MVAR, replace five 138 kV breakers at Cecil due to increased short circuit fault duty as a result of the addition of the Prexy substation	APS (100%)
b0586	Increase Whiteley 138 kV capacitor size to 44 MVAR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0587	Reconductor AP portion of Tidd – Carnegie 138 kV and Carnegie – Weirton 138 kV with 954 ACSR	APS (100%)
b0588	Install a 40.8 MVAR 138 kV capacitor at Grassy Falls	APS (100%)
b0589	Replace five 138 kV breakers at Cecil	APS (100%)
b0590	Replace #1 and #2 breakers at Charleroi 138 kV	APS (100%)
b0591	Install a 25.2 MVAR capacitor at Seneca Caverns 138 kV	APS (100%)
b0673	Rebuild Elko – Carbon Center Junction using 230 kV construction	APS (100%)
b0674	Construct new Osage – Whiteley 138 kV circuit	APS (97.68%) / DL (0.96%) / PENELEC (1.09%) / ECP** (0.01%) / PSEG (0.25%) / RE (0.01%)
b0674.1	Replace the Osage 138 kV breaker ‘CollinsF126’	APS (100%)
b0675.1	Convert Monocacy - Walkersville 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.2	Convert Walkersville - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.3	Convert Ringgold - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.4	Convert Catoctin - Carroll 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.5	Convert portion of Ringgold Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.6	Convert Catoctin Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.7	Convert portion of Carroll Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.8	Convert Monocacy Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.9	Convert Walkersville Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0676.1	Reconductor Doubs - Lime Kiln (#207) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0676.2	Reconductor Doubs - Lime Kiln (#231) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0677	Reconductor Double Toll Gate – Riverton with 954 ACSR	APS (100%)
b0678	Reconductor Glen Falls - Oak Mound 138kV with 954 ACSR	APS (100%)
b0679	Reconductor Grand Point – Letterkenny with 954 ACSR	APS (100%)
b0680	Reconductor Greene – Letterkenny with 954 ACSR	APS (100%)
b0681	Replace 600/5 CT's at Franklin 138 kV	APS (100%)
b0682	Replace 600/5 CT's at Whiteley 138 kV	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0684	Reconductor Guilford – South Chambersburg with 954 ACSR	APS (100%)
b0685	Replace Ringgold 230/138 kV #3 with larger transformer	APS (71.93%) / JCPL (4.17%) / ME (6.79%) / NEPTUNE* (0.38%) / PECO (4.05%) / PENELEC (5.88%) / ECP** (0.18%) / PSEG (6.37%) / RE (0.25%)
b0704	Install a third Cabot 500/138 kV transformer	APS (74.36%) / DL (2.73%) PENELEC (22.91%)
b0797	Advance n0321 (Replace Doubs Circuit Breaker DJ2)	APS(100%)
b0798	Advance n0322 (Replace Doubs Circuit Breaker DJ3)	APS(100%)
b0799	Advance n0323 (Replace Doubs Circuit Breaker DJ6)	APS(100%)
b0800	Advance n0327 (Replace Doubs Circuit Breaker DJ16)	APS(100%)
b0941	Replace Opequon 138 kV breaker 'BUSTIE'	APS(100%)
b0942	Replace Butler 138 kV breaker '#1 BANK'	APS(100%)
b0943	Replace Butler 138 kV breaker '#2 BANK'	APS(100%)
b0944	Replace Yukon 138 kV breaker 'Y-8'	APS(100%)
b0945	Replace Yukon 138 kV breaker 'Y-3'	APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0946	Replace Yukon 138 kV breaker 'Y-1'		APS(100%)
b0947	Replace Yukon 138 kV breaker 'Y-5'		APS(100%)
b0948	Replace Yukon 138 kV breaker 'Y-2'		APS(100%)
b0949	Replace Yukon 138 kV breaker 'Y-19'		APS(100%)
b0950	Replace Yukon 138 kV breaker 'Y-4'		APS(100%)
b0951	Replace Yukon 138 kV breaker 'Y-9'		APS(100%)
b0952	Replace Yukon 138 kV breaker 'Y-11'		APS(100%)
b0953	Replace Yukon 138 kV breaker 'Y-13'		APS(100%)
b0954	Replace Charleroi 138 kV breaker '#1 XFMR BANK'		APS(100%)
b0955	Replace Yukon 138 kV breaker 'Y-7'		APS(100%)
b0956	Replace Pruntytown 138 kV breaker 'P-9'		APS(100%)
b0957	Replace Pruntytown 138 kV breaker 'P-12'		APS(100%)
b0958	Replace Pruntytown 138 kV breaker 'P-15'		APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0959	Replace Charleroi 138 kV breaker '#2 XFMR BANK'	APS(100%)
b0960	Replace Pruntytown 138 kV breaker 'P-2'	APS(100%)
b0961	Replace Pruntytown 138 kV breaker 'P-5'	APS(100%)
b0962	Replace Yukon 138 kV breaker 'Y-18'	APS(100%)
b0963	Replace Yukon 138 kV breaker 'Y-10'	APS(100%)
b0964	Replace Pruntytown 138 kV breaker 'P-11'	APS(100%)
b0965	Replace Springdale 138 kV breaker '138E'	APS(100%)
b0966	Replace Pruntytown 138 kV breaker 'P-8'	APS(100%)
b0967	Replace Pruntytown 138 kV breaker 'P-14'	APS(100%)
b0968	Replace Ringgold 138 kV breaker '#3 XFMR BANK'	APS(100%)
b0969	Replace Springdale 138 kV breaker '138C'	APS(100%)
b0970	Replace Rivesville 138 kV breaker '#8 XFMR BANK'	APS(100%)
b0971	Replace Springdale 138 kV breaker '138F'	APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0972	Replace Belmont 138 kV breaker 'B-16'		APS(100%)
b0973	Replace Springdale 138 kV breaker '138G'		APS(100%)
b0974	Replace Springdale 138 kV breaker '138V'		APS(100%)
b0975	Replace Armstrong 138 kV breaker 'BROOKVILLE'		APS(100%)
b0976	Replace Springdale 138 kV breaker '138P'		APS(100%)
b0977	Replace Belmont 138 kV breaker 'B-17'		APS(100%)
b0978	Replace Springdale 138 kV breaker '138U'		APS(100%)
b0979	Replace Springdale 138 kV breaker '138D'		APS(100%)
b0980	Replace Springdale 138 kV breaker '138R'		APS(100%)
b0981	Replace Yukon 138 kV breaker 'Y-12'		APS(100%)
b0982	Replace Yukon 138 kV breaker 'Y-17'		APS(100%)
b0983	Replace Yukon 138 kV breaker 'Y-14'		APS(100%)
b0984	Replace Rivesville 138 kV breaker '#10 XFMR BANK'		APS(100%)
b0985	Replace Belmont 138 kV breaker 'B-14'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0986	Replace Armstrong 138 kV breaker 'RESERVE BUS'		APS(100%)
b0987	Replace Yukon 138 kV breaker 'Y-16'		APS(100%)
b0988	Replace Springdale 138 kV breaker '138T'		APS(100%)
b0989	Replace Edgelawn 138 kV breaker 'GOFF RUN #632'		APS(100%)
b0990	Change reclosing on Cabot 138 kV breaker 'C-9'		APS(100%)
b0991	Change reclosing on Belmont 138 kV breaker 'B-7'		APS(100%)
b0992	Change reclosing on Belmont 138 kV breaker 'B-12'		APS(100%)
b0993	Change reclosing on Belmont 138 kV breaker 'B-9'		APS(100%)
b0994	Change reclosing on Belmont 138 kV breaker 'B-19'		APS(100%)
b0995	Change reclosing on Belmont 138 kV breaker 'B-21'		APS(100%)
b0996	Change reclosing on Willow Island 138 kV breaker 'FAIRVIEW #84'		APS(100%)
b0997	Change reclosing on Cabot 138 kV breaker 'C-4'		APS(100%)
b0998	Change reclosing on Cabot 138 kV breaker 'C-1'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0999	Replace Redbud 138 kV breaker 'BUS TIE'		APS(100%)
b1022.1	Reconfigure the Peters to Bethel Park 138 kV line and Elrama to Woodville 138 kV line to create a 138 kV path from Woodville to Peters and a 138 kV path from Elrama to Bethel Park		APS (96.98%) / DL (3.02%)
b1022.3	Add static capacitors at Smith 138 kV		APS (96.98%) / DL (3.02%)
b1022.4	Add static capacitors at North Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.5	Add static capacitors at South Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.6	Add static capacitors at Manifold 138 kV		APS (96.98%) / DL (3.02%)
b1022.7	Add static capacitors at Houston 138 kV		APS (96.98%) / DL (3.02%)
b1023.1	Install a 500/138 kV transformer at 502 Junction		APS (100%)
b1023.2	Construct a new Franklin - 502 Junction 138 kV line including a rebuild of the Whiteley - Franklin 138 kV line to double circuit		APS (100%)
b1023.3	Construct a new 502 Junction - Osage 138 kV line		APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1023.4	Construct Braddock 138 kV breaker station that connects the Charleroi - Gordon 138 kV line, Washington - Franklin 138 kV line and the Washington - Vanceville 138 kV line including a 66 MVAR capacitor	APS (100%)
b1027	Increase the size of the shunt capacitors at Enon 138 kV	APS (100%)
b1028	Raise three structures on the Osage - Collins Ferry 138 kV line to increase the line rating	APS (100%)
b1128	Reconductor the Edgewater – Vasco Tap; Edgewater – Loyalhanna 138 kV lines with 954 ACSR	APS (100%)
b1129	Reconductor the East Waynesboro – Ringgold 138 kV line with 954 ACSR	APS (100%)
b1131	Upgrade Double Tollgate – Meadowbrook MDT Terminal Equipment	APS (100%)
b1132	Upgrade Double Tollgate-Meadowbrook MBG terminal equipment	APS (100%)
b1133	Upgrade terminal equipment at Springdale	APS (100%)
b1135	Reconductor the Bartonville – Meadowbrook 138 kV line with high temperature conductor	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1137	Reconductor the Eastgate – Luxor 138 kV; Eastgate – Sony 138 kV line with 954 ACSR	APS (78.59%) / PENELEC (14.08%) / ECP ** (0.23%) / PSEG (6.83%) / RE (0.27%)
b1138	Reconductor the King Farm – Sony 138 kV line with 954 ACSR	APS (100%)
b1139	Reconductor the Yukon – Waltz Mills 138 kV line with high temperature conductor	APS (100%)
b1140	Reconductor the Bracken Junction – Luxor 138 kV line with 954 ACSR	APS (100%)
b1141	Reconductor the Sewickley – Waltz Mills Tap 138 kV line with high temperature conductor	APS (100%)
b1142	Reconductor the Bartonsville – Stephenson 138 kV; Stonewall – Stephenson 138 kV line with 954 ACSR	APS (100%)
b1143	Reconductor the Youngwood – Yukon 138 kV line with high temperature conductor	APS (89.92%) / PENELEC (10.08%)
b1144	Reconductor the Bull Creek Junction – Cabot 138 kV line with high temperature conductor	APS (100%)

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1145	Reconductor the Lawson Junction – Cabot 138 kV line with high temperature conductor	APS (100%)
b1146	Replace Layton - Smithton #61 138 kV line structures to increase line rating	APS (100%)
b1147	Replace Smith – Yukon 138 kV line structures to increase line rating	APS (100%)
b1148	Reconductor the Loyalhanna – Luxor 138 kV line with 954 ACSR	APS (100%)
b1149	Reconductor the Luxor – Stony Springs Junction 138 kV line with 954 ACSR	APS (100%)
b1150	Upgrade terminal equipment at Social Hall	APS (100%)
b1151	Reconductor the Greenwood – Redbud 138 kV line with 954 ACSR	APS (100%)
b1152	Reconductor Grand Point – South Chambersburg	APS (100%)
b1159	Replace Peters 138 kV breaker ‘Bethel P OCB’	APS (100%)
b1160	Replace Peters 138 kV breaker ‘Cecil OCB’	APS (100%)
b1161	Replace Peters 138 kV breaker ‘Union JctOCB’	APS (100%)
b1162	Replace Double Toll Gate 138 kV breaker ‘DRB-2’	APS (100%)
b1163	Replace Double Toll Gate 138 kV breaker ‘DT 138 kV OCB’	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1164	Replace Cecil 138 kV breaker 'Enlow OCB'	APS (100%)
b1165	Replace Cecil 138 kV breaker 'South Fayette'	APS (100%)
b1166	Replace Wylie Ridge 138 kV breaker 'W-9'	APS (100%)
b1167	Replace Reid 138 kV breaker 'RI-2'	APS (100%)
b1171.1	Install the second Black Oak 500/138 kV transformer, two 138 kV breaker, and related substation work	BGE (20.76%) / DPL (3.14%) / Dominion (39.55%) / ME (2.71%) / PECO (3.36%) / PEPCO (30.48%)
b1171.3	Install six 500 kV breakers and remove BOL1 500 kV breaker at Black Oak	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b1200	Reconductor Double Toll Gate – Greenwood 138 kV with 954 ACSR conductor	APS (100%)
b1221.1	Convert Carbon Center from 138 kV to a 230 kV ring bus	APS (100%)
b1221.2	Construct Bear Run 230 kV substation with 230/138 kV transformer	APS (100%)

\*Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1221.3	Loop Carbon Center Junction – Williamette line into Bear Run		APS (100%)
b1221.4	Carbon Center – Carbon Center Junction & Carbon Center Junction – Bear Run conversion from 138 kV to 230 kV		APS (100%)
b1230	Reconductor Willow-Eureka & Eureka-St Mary 138 kV lines		APS (100%)
b1232	Reconductor Nipetown – Reid 138 kV with 1033 ACCR		AEC (1.40%) / APS (75.74%) / DPL (1.92%) / JCPL (2.92%) / ME (6.10%) / Neptune (0.27%) / PECO (4.40%) / PENELEC (3.26%) / PPL (3.99%)
b1233.1	Upgrade terminal equipment at Washington		APS (100%)
b1234	Replace structures between Ridgeway and Paper city		APS (100%)
b1235	Reconductor the Albright – Black Oak AFA 138 kV line with 795 ACSS/TW		APS (30.25%) / BGE (16.10%) / Dominion (30.51%) / PEPCO (23.14%)
b1237	Upgrade terminal equipment at Albright, replace bus and line side breaker disconnects and leads, replace breaker risers, upgrade RTU and line		APS (100%)
b1238	Install a 138 kV 44 MVAR capacitor at Edgelawn substation		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1239	Install a 138 kV 44 MVAR capacitor at Ridgeway substation	APS (100%)
b1240	Install a 138 kV 44 MVAR capacitor at Elko Substation	APS (100%)
b1241	Upgrade terminal equipment at Washington substation on the GE Plastics/DuPont terminal	APS (100%)
b1242	Replace structures between Collins Ferry and West Run	APS (100%)
b1243	Install a 138 kV capacitor at Potter Substation	APS (100%)
b1261	Replace Butler 138 kV breaker '1-2 BUS 138'	APS (100%)
b1383	Install 2nd 500/138 kV transformer at 502 Junction	APS (93.27%) / DL (5.39%) / PENELEC (1.34%)
b1384	Reconductor approximately 2.17 miles of Bedington – Shepherdstown 138 kV with 954 ACSR	APS (100%)
b1385	Reconductor Halfway – Paramount 138 kV with 1033 ACCR	APS (100%)
b1386	Reconductor Double Tollgate – Meadow Brook 138 kV ckt 2 with 1033 ACCR	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1387	Reconductor Double Tollgate – Meadow Brook 138 kV	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1388	Reconductor Feagans Mill – Millville 138 kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1389	Reconductor Bens Run – St. Mary’s 138 kV with 954 ACSR		AEP (12.40%) / APS (17.80%) / DL (69.80%)
b1390	Replace Bus Tie Breaker at Opequon		APS (100%)
b1391	Replace Line Trap at Gore		APS (100%)
b1392	Replace structure on Belmont – Trissler 138 kV line		APS (100%)
b1393	Replace structures Kingwood – Pruntytown 138 kV line		APS (100%)
b1395	Upgrade Terminal Equipment at Kittanning		APS (100%)
b1401	Change reclosing on Pruntytown 138 kV breaker ‘P-16’ to 1 shot at 15 seconds		APS (100%)
b1402	Change reclosing on Rivesville 138 kV breaker ‘Pruntytown #34’ to 1 shot at 15 seconds		APS (100%)
b1403	Change reclosing on Yukon 138 kV breaker ‘Y21 Shepler’ to 1 shot at 15 seconds		APS (100%)
b1404	Replace the Kiski Valley 138 kV breaker ‘Vandergrift’ with a 40 kA breaker		APS (100%)
b1405	Change reclosing on Armstrong 138 kV breaker ‘GARETTRJCT’ at 1 shot at 15 seconds		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1406	Change reclosing on Armstrong 138 kV breaker 'KITTANNING' to 1 shot at 15 seconds		APS (100%)
b1407	Change reclosing on Armstrong 138 kV breaker 'BURMA' to 1 shot at 15 seconds		APS (100%)
b1408	Replace the Weirton 138 kV breaker 'Tidd 224' with a 40 kA breaker		APS (100%)
b1409	Replace the Cabot 138 kV breaker 'C9 Kiski Valley' with a 40 kA breaker		APS (100%)
b1507.2	Terminal Equipment upgrade at Doubs substation		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1507.3	Mt. Storm – Doubs transmission line rebuild in Maryland – Total line mileage for APS is 2.71 miles	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)</p>
b1510	Install 59.4 MVAR capacitor at Waverly	APS (100%)
b1672	Install a 230 kV breaker at Carbon Center	APS (100%)
b0539	Replace Doubs circuit breaker DJ11	APS (100%)
b0540	Replace Doubs circuit breaker DJ12	APS (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0541	Replace Doubs circuit breaker DJ13		APS (100%)
b0542	Replace Doubs circuit breaker DJ20		APS (100%)
b0543	Replace Doubs circuit breaker DJ21		APS (100%)
b0544	Remove instantaneous reclose from Eastalco circuit breaker D-26		APS (100%)
b0545	Remove instantaneous reclose from Eastalco circuit breaker D-28		APS (100%)
b0559	Install 200 MVAR capacitor at Meadow Brook 500 kV substation		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0560	Install 250 MVAR capacitor at Kemptown 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>

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\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1803	Build a 300 MVAR Switched Shunt at Doubs 500 kV and increase (~50 MVAR) in size the existing Switched Shunt at Doubs 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)</p>
b1804	Install a new 600 MVAR SVC at Meadowbrook 500kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</p>
b1816.1	Replace relaying at the Mt. Airy substation on the Carroll - Mt. Airy 230 kV line	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1816.2	Adjust the control settings of all existing capacitors at Mt Airy 34.5kV, Monocacy 138kV, Ringgold 138kV served by Potomac Edison's Eastern 230 kV network to ensure that all units will be on during the identified N-1-1 contingencies	APS (100%)
b1816.3	Replace existing unidirectional LTC controller on the No. 4, 230/138 kV transformer at Carroll substation with a bidirectional unit	APS (100%)
b1816.4	Isolate and bypass the 138 kV reactor at Germantown Substation	APS (100%)
b1816.6	Replace 336.4 ACSR conductor on the Catocin - Carroll 138 kV line using 556.5 ACSR (26/7) or equivalent on existing structures (12.7 miles), 800 A wave traps at Carroll and Catocin with 1200 A units, and 556.5 ACSR SCCIR (Sub-conductor) line risers and bus traps with 795 ACSR or equivalent	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1822	Replace the 1200 A wave trap, line risers, breaker risers with 1600 A capacity terminal equipment at Reid 138 kV SS	
b1823	Replace the 800 A wave trap with a 1200 A wave trap at Millville 138 kV substation	APS (100%)
b1824	Reconductor Grant Point - Guilford 138kV line approximately 8 miles of 556 ACSR with 795 ACSR	APS (100%)
b1825	Replace the 800 Amp line trap at Butler 138 kV Sub on the Cabot East 138 kV line	APS (100%)
b1826	Change the CT ratio at Double Toll Gate 138 kV SS on MDT line	APS (100%)
b1827	Change the CT ratio at Double Toll Gate 138 kV SS on MBG line	APS (100%)
b1828.1	Reconductor the Bartonville – Stephenson 3.03 mile 138 kV line of 556 ACSR with 795 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1828.2	Reconductor the Stonewall – Stephenson 2.08 mile 138 kV line of 556 ACSR with 795 ACSR		APS (100%)
b1829	Replace the existing 138 kV 556.5 ACSR substation conductor risers with 954 ACSR at the Redbud 138 kV substation, including but not limited to the line side disconnect leads		APS (100%)
b1830	Replace 1200 A wave trap and 1024 ACAR breaker risers at Halfway 138 kV substation, and replace 1024 ACAR breaker risers at Paramount 138 kV substation		APS (100%)
b1832	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 1 (207) 230 kV line terminal		APS (100%)
b1833	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 2 (231) 230 kV line terminal		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1835	Reconductor 14.3 miles of 556 ACSR with 795 ACSR from Old Chapel to Millville 138 kV and upgrade line risers at Old Chapel 138 kV and Millville 138 kV and replace 1200 A wave trap at Millville 138 kV	APS (37.68%) / Dominion (34.46%) / PEPCO (13.69%) / BGE (11.45%) / ME (2.01%) / PENELEC (0.53%) / DL (0.18%)
b1836	Replace 1200 A wave trap with 1600 A wave trap at Reid 138 kV SS	APS (100%)
b1837	Replace 750 CU breaker risers with 795 ACSR at Marlowe 138 kV and replace 1200 A wave traps with 1600 A wave traps at Marlowe 138 kV and Bedington 138 kV	APS (100%)
b1838	Replace the 1200 A Bedington 138 kV line air switch and the 1200 A 138 kV bus tie air switch at Nipetown 138 kV with 1600 A switches	APS (100%)
b1839	Install additional 33 MVAR capacitors at Grand Point 138 kV SS and Guildford 138 kV SS	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1840	Construct a 138 kV line between Buckhannon and Weston 138 kV substations	APS (100%)
b1902	Replace line trap at Stonewall on the Stephenson 138 kV line terminal	APS (100%)
b1941	Loop the Homer City-Handsome Lake 345 kV line into the Armstrong substation and install a 345/138 kV transformer at Armstrong	APS (67.86%) / PENELEC (32.14%)
b1942	Change the CT ratio at Millville to improve the Millville – Old Chapel 138 kV line ratings	APS (100%)
b1964	Convert Moshannon substation to a 4 breaker 230 kV ring bus	APS (41.06%) / DPL (6.68%) / JCPL (5.48%) / ME (10.70%) / Neptune* (0.53%) / PECO (15.53%) / PPL (20.02%)
b1965	Install a 44 MVAR 138 kV capacitor at Luxor substation	APS (100%)
b1986	Upgrade the AP portion of the Elrama – Mitchell 138 kV line by replace breaker risers on the Mitchell 138 kV bus on the Elrama terminal	APS (100%)
b1987	Reconductor the Osage-Collins Ferry 138 kV line with 795 ACSS. Upgrade terminal equipment at Osage and Collins Ferry	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1988	Raise structures between Lake Lynn and West Run to eliminate the clearance de-rates on the West Run – Lake Lynn 138 kV line	APS (100%)
b1989	Raise structures between Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line	APS (100%)
b2095	Replace Weirt 138 kV breaker 'S-TORONTO226' with 63kA rated breaker	APS (100%)
b2096	Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'	APS (100%)
b2097	Replace Ridgeley 138 kV breaker '#2 XFMR OCB'	APS (100%)
b2098	Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker	APS (100%)
b2099	Revise the reclosing of Ridgeley 138 kV breaker 'RC1'	APS (100%)
b2100	Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker	APS (100%)
b2101	Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker	APS (100%)
b2102	Replace Armstrong 138 kV breaker 'GARETTRJCT' with 40kA rated breaker	APS (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2103	Replace Armstrong 138 kV breaker 'BURMA' with 40kA rated breaker		APS (100%)
b2104	Replace Armstrong 138 kV breaker 'KITANNING' with 40kA rated breaker		APS (100%)
b2105	Replace Armstrong 138 kV breaker 'KISSINGERJCT' with 40kA rated breaker		APS (100%)
b2106	Replace Wylie Ridge 345 kV breaker 'WK-1' with 63kA rated breaker		APS (100%)
b2107	Replace Wylie Ridge 345 kV breaker 'WK-2' with 63kA rated breaker		APS (100%)
b2108	Replace Wylie Ridge 345 kV breaker 'WK-3' with 63kA rated breaker		APS (100%)
b2109	Replace Wylie Ridge 345 kV breaker 'WK-4' with 63kA rated breaker		APS (100%)
b2110	Replace Wylie Ridge 345 kV breaker 'WK-6' with 63kA rated breaker		APS (100%)
b2111	Replace Wylie Ridge 138 kV breaker 'WK-7' with 63kA rated breaker		APS (100%)
b2112	Replace Wylie Ridge 345 kV breaker 'WK-5'		APS (100%)
b2113	Replace Weirton 138 kV breaker 'NO 6 XFMR' with 63kA rated breaker		APS (100%)
b2114	Replace Armstrong 138 kV breaker 'Bus-Tie' (Status On-Hold pending retirement)		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2124.1	Add a new 138 kV line exit		APS (100%)
b2124.2	Construct a 138 kV ring bus and install a 138/69 kV autotransformer		APS (100%)
b2124.3	Add new 138 kV line exit and install a 138/25 kV transformer		APS (100%)
b2124.4	Construct approximately 5.5 miles of 138 kV line		APS (100%)
b2124.5	Convert approximately 7.5 miles of 69 kV to 138 kV		APS (100%)
b2156	Install a 75 MVAR 230 kV capacitor at Shingletown Substation		APS (100%)
b2165	Replace 800A wave trap at Stonewall with a 1200 A wave trap		APS (100%)
b2166	Reconductor the Millville – Sleepy Hollow 138kV 4.25 miles of 556 ACSR with 795 ACSR, upgrade line risers at Sleepy Hollow, and change 1200 A CT tap at Millville to 800		APS (100%)
b2168	For Grassy Falls 138kV Capacitor bank adjust turn-on voltage to 1.0pu with a high limit of 1.04pu, For Crupperneck and Powell Mountain 138kV Capacitor Banks adjust turn-on voltage to 1.01pu with a high limit of 1.035pu		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2169	Replace/Raise structures on the Yukon-Smithton 138 kV line section to eliminate clearance de-rate	APS (100%)
b2170	Replace/Raise structures on the Smithton-Shepler Hill Jct 138 kV line section to eliminate clearance de-rate	APS (100%)
b2171	Replace/Raise structures on the Parsons-William 138 kV line section to eliminate clearance de-rate	APS (100%)
b2172	Replace/Raise structures on the Parsons - Loughs Lane 138 kV line section to eliminate clearance de-rate	APS (100%)

## SCHEDULE 12 – APPENDIX

- (17) **AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0318	Install a 765/138 kV transformer at Amos		AEP (99.00%) / PEPCO (1.00%)
b0324	Replace entrance conductors, wave traps, and risers at the Tidd 345 kV station on the Tidd – Canton Central 345 kV circuit		AEP (100%)
b0447	Replace Cook 345 kV breaker M2		AEP (100%)
b0448	Replace Cook 345 kV breaker N2		AEP (100%)
b0490	Construct an Amos – Bedington 765 kV circuit (AEP equipment)	As specified under the procedures detailed in Attachment H-19B	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.2	Replace Amos 138 kV breaker 'B'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0490.3	Replace Amos 138 kV breaker 'B1'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.4	Replace Amos 138 kV breaker 'C'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0490.5	Replace Amos 138 kV breaker 'C1'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.6	Replace Amos 138 kV breaker 'D'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0490.7	Replace Amos 138 kV breaker 'D2'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.8	Replace Amos 138 kV breaker 'E'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0490.9	Replace Amos 138 kV breaker 'E2'	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0504	Add two advanced technology circuit breakers at Hanging Rock 765 kV to improve operational performance		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> AEP (100%)
b0570	Reconductor East Side Lima – Sterling 138 kV		AEP (41.99%) / ComEd (58.01%)
b0571	Reconductor West Millersport – Millersport 138 kV		AEP (73.83%) / ComEd (19.26%) / Dayton (6.91%)
b0748	Establish a new 69 kV circuit between the Canal Road and East Wooster stations, establish a new 69 kV circuit between the West Millersburg and Moreland Switch stations (via Shreve), add reactive support via cap banks		AEP (100%)
b0838	Hazard Area 138 kV and 69 kV Improvement Projects		AEP (100%)
b0839	Replace existing 450 MVA transformer at Twin Branch 345 / 138 kV with a 675 MVA transformer		AEP (99.73%) / Dayton (0.27%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0840	String a second 138 kV circuit on the open tower position between Twin Branch and East Elkhart	AEP (100%)
b0840.1	Establish a new 138/69-34.5kV Station to interconnect the existing 34.5kV network	AEP (100%)
b0917	Replace Baileysville 138 kV breaker 'P'	AEP (100%)
b0918	Replace Riverview 138 kV breaker '634'	AEP (100%)
b0919	Replace Torrey 138 kV breaker 'W'	AEP (100%)
b1032.1	Construct a new 345/138kV station on the Marquis-Bixby 345kV line near the intersection with Ross - Highland 69kV	AEP (89.97%) / Dayton (10.03%)
b1032.2	Construct two 138kV outlets to Delano 138kV station and to Camp Sherman station	AEP (89.97%) / Dayton (10.03%)
b1032.3	Convert Ross - Circleville 69kV to 138kV	AEP (89.97%) / Dayton (10.03%)
b1032.4	Install 138/69kV transformer at new station and connect in the Ross - Highland 69kV line	AEP (89.97%) / Dayton (10.03%)
b1033	Add a third delivery point from AEP's East Danville Station to the City of Danville.	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.1	Establish new South Canton - West Canton 138kV line (replacing Torrey - West Canton) and Wagenhals - Wayview 138kV	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.2	Loop the existing South Canton - Wayview 138kV circuit in-and-out of West Canton	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.3	Install a 345/138kV 450 MVA transformer at Canton Central	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.4	Rebuild/reconductor the Sunnyside - Torrey 138kV line	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.5	Disconnect/eliminate the West Canton 138kV terminal at Torrey Station	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.6	Replace all 138kV circuit breakers at South Canton Station and operate the station in a breaker and a half configuration	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.7	Replace all obsolete 138kV circuit breakers at the Torrey and Wagenhals stations	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.8	Install additional 138kV circuit breakers at the West Canton, South Canton, Canton Central, and Wagenhals stations to accommodate the new circuits	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1035	Establish a third 345kV breaker string in the West Millersport Station. Construct a new West Millersport – Gahanna 138kV circuit. Miscellaneous improvements to 138kV transmission system.	AEP (100%)
b1036	Upgrade terminal equipment at Poston Station and update remote end relays	AEP (100%)
b1037	Sag check Bonsack–Cloverdale 138 kV, Cloverdale–Centerville 138kV, Centerville–Ivy Hill 138kV, Ivy Hill–Reusens 138kV, Bonsack–Reusens 138kV and Reusens–Monel–Gomingo–Joshua Falls 138 kV.	AEP (100%)
b1038	Check the Crooksville - Muskingum 138 kV sag and perform the required work to improve the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1039	Perform a sag study for the Madison – Cross Street 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1040	Rebuild an 0.065 mile section of the New Carlisle – Olive 138 kV line and change the 138 kV line switches at New Carlisle	AEP (100%)
b1041	Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating	AEP (100%)
b1042	Perform sag studies to raise the emergency rating of Amos – Poca 138kV	AEP (100%)
b1043	Perform sag studies to raise the emergency rating of Turner - Ruth 138kV	AEP (100%)
b1044	Perform sag studies to raise the emergency rating of Kenova – South Point 138kV	AEP (100%)
b1045	Perform sag studies of Tri State - Darrah 138 kV	AEP (100%)
b1046	Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating	AEP (100%)
b1047	Perform sag study of Otter Switch - Altavista 138kV to raise the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1048	Reconductor the Bixby - Three C - Groves and Bixby - Groves 138 kV tower line	AEP (100%)
b1049	Upgrade the risers at the Riverside station to increase the rating of Benton Harbor – Riverside 138kV	AEP (100%)
b1050	Rebuilding and reconductor the Bixby – Pickerington Road - West Lancaster 138 kV line	AEP (100%)
b1051	Perform a sag study for the Kenzie Creek – Pokagon 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1052	Unsix-wire the existing Hyatt - Sawmill 138 kV line to form two Hyatt - Sawmill 138 kV circuits	AEP (100%)
b1053	Perform a sag study and remediation of 32 miles between Claytor and Matt Funk.	AEP (100%)
b1091	Add 28.8 MVAR 138 kV capacitor bank at Huffman and 43.2 MVAR 138 kV Bank at Jubal Early and 52.8 MVAR 138 kV Bank at Progress Park Stations	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1092	Add 28.8 MVAR 138 kV capacitor bank at Sullivan Gardens and 52.8 MVAR 138 kV Bank at Reedy Creek Stations	AEP (100%)
b1093	Add a 43.2 MVAR capacitor bank at the Morgan Fork 138 kV Station	AEP (100%)
b1094	Add a 64.8 MVAR capacitor bank at the West Huntington 138 kV Station	AEP (100%)
b1108	Replace Ohio Central 138 kV breaker 'C2'	AEP (100%)
b1109	Replace Ohio Central 138 kV breaker 'D1'	AEP (100%)
b1110	Replace Sporn A 138 kV breaker 'J'	AEP (100%)
b1111	Replace Sporn A 138 kV breaker 'J2'	AEP (100%)
b1112	Replace Sporn A 138 kV breaker 'L'	AEP (100%)
b1113	Replace Sporn A 138 kV breaker 'L1'	AEP (100%)
b1114	Replace Sporn A 138 kV breaker 'L2'	AEP (100%)
b1115	Replace Sporn A 138 kV breaker 'N'	AEP (100%)
b1116	Replace Sporn A 138 kV breaker 'N2'	AEP (100%)
b1227	Perform a sag study on Altavista – Leesville 138 kV circuit	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1231	Replace the existing 138/69-12 kV transformer at West Moulton Station with a 138/69 kV transformer and a 69/12 kV transformer	AEP (96.69%) / Dayton (3.31%)
b1375	Replace Roanoke 138 kV breaker 'T'	AEP (100%)
b1376	Replace Roanoke 138 kV breaker 'E'	AEP (100%)
b1377	Replace Roanoke 138 kV breaker 'F'	AEP (100%)
b1378	Replace Roanoke 138 kV breaker 'G'	AEP (100%)
b1379	Replace Roanoke 138 kV breaker 'B'	AEP (100%)
b1380	Replace Roanoke 138 kV breaker 'A'	AEP (100%)
b1381	Replace Olive 345 kV breaker 'E'	AEP (100%)
b1382	Replace Olive 345 kV breaker 'R2'	AEP (100%)
b1416	Perform a sag study on the Desoto – Deer Creek 138 kV line to increase the emergency rating	AEP (100%)
b1417	Perform a sag study on the Delaware – Madison 138 kV line to increase the emergency rating	AEP (100%)
b1418	Perform a sag study on the Rockhill – East Lima 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1419	Perform a sag study on the Findlay Center – Fostoria Ctl 138 kV line to increase the emergency rating	AEP (100%)
b1420	A sag study will be required to increase the emergency rating for this line. Depending on the outcome of this study, more action may be required in order to increase the rating	AEP (100%)
b1421	Perform a sag study on the Sorenson – McKinley 138 kV line to increase the emergency rating	AEP (100%)
b1422	Perform a sag study on John Amos – St. Albans 138 kV line to allow for operation up to its conductor emergency rating	AEP (100%)
b1423	A sag study will be performed on the Chemical – Capitol Hill 138 kV line to determine if the emergency rating can be utilized	AEP (100%)
b1424	Perform a sag study for Benton Harbor – West Street – Hartford 138 kV line to improve the emergency rating	AEP (100%)
b1425	Perform a sag study for the East Monument – East Danville 138 kV line to allow for operation up to the conductor's maximum operating temperature	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1426	Perform a sag study for the Reusens – Graves 138 kV line to allow for operation up to the conductor’s maximum operating temperature	AEP (100%)
b1427	Perform a sag study on Smith Mountain – Leesville – Altavista – Otter 138 kV and on Boones – Forest – New London – JohnsMT – Otter	AEP (100%)
b1428	Perform a sag study on Smith Mountain – Candler’s Mountain 138 kV and Joshua Falls – Cloverdale 765 kV to allow for operation up to	AEP (100%)
b1429	Perform a sag study on Fremont – Clinch River 138 kV to allow for operation up to its conductor emergency ratings	AEP (100%)
b1430	Install a new 138 kV circuit breaker at Benton Harbor station and move the load from Watervliet 34.5 kV station to West street 138 kV	AEP (100%)
b1432	Perform a sag study on the Kenova – Tri State 138 kV line to allow for operation up to their conductor emergency rating	AEP (100%)
b1433	Replace risers in the West Huntington Station to increase the line ratings which would eliminate the overloads for the contingencies listed	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1434 Perform a sag study on the line from Desoto to Madison. Replace bus and risers at Daleville station and replace bus and risers at Madison		AEP (100%)
b1435 Replace the 2870 MCM ACSR riser at the Sporn station		AEP (100%)
b1436 Perform a sag study on the Sorenson – Illinois Road 138 kV line to increase the emergency MOT for this line. Replace bus and risers at Illinois Road		AEP (100%)
b1437 Perform sag study on Rock Cr. – Hummel Cr. 138 kV to increase the emergency MOT for the line, replace bus and risers at Huntington J., and replace relays for Hummel Cr. – Hunt – Soren. Line at Soren		AEP (100%)
b1438 Replacement of risers at McKinley and Industrial Park stations and performance of a sag study for the 4.53 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA		AEP (100%)
b1439 By replacing the risers at Lincoln both the Summer Normal and Summer Emergency ratings will improve to 268 MVA		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1440	By replacing the breakers at Lincoln the Summer Emergency rating will improve to 251 MVA	AEP (100%)
b1441	Replacement of risers at South Side and performance of a sag study for the 1.91 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1442	Replacement of 954 ACSR conductor with 1033 ACSR and performance of a sag study for the 4.54 miles of 2-636 ACSR section is expected	AEP (100%)
b1443	Station work at Thelma and Busseyville Stations will be performed to replace bus and risers	AEP (100%)
b1444	Perform electrical clearance studies on Clinch River – Clinchfield 139 kV line (a.k.a. sag studies) to determine if the emergency ratings can be utilized	AEP (100%)
b1445	Perform a sag study on the Addison (Buckeye CO-OP) – Thinever and North Crown City – Thivener 138 kV sag study and switch	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1446	Perform a sag study on the Parkersburg (Allegheny Power) – Belpre (AEP) 138 kV	AEP (100%)
b1447	Dexter – Elliot tap 138 kV sag check	AEP (100%)
b1448	Dexter – Meigs 138 kV Electrical Clearance Study	AEP (100%)
b1449	Meigs tap – Rutland 138 kV sag check	AEP (100%)
b1450	Muskingum – North Muskingum 138 kV sag check	AEP (100%)
b1451	North Newark – Sharp Road 138 kV sag check	AEP (100%)
b1452	North Zanesville – Zanesville 138 kV sag check	AEP (100%)
b1453	North Zanesville – Powelson and Ohio Central – Powelson 138 kV sag check	AEP (100%)
b1454	Perform an electrical clearance study on the Ross – Delano – Scioto Trail 138 kV line to determine if the emergency rating can be utilized	AEP (100%)
b1455	Perform a sag check on the Sunny – Canton Central – Wagenhals 138 kV line to determine if all circuits can be operated at their summer emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1456	The Tidd – West Bellaire 345 kV circuit has been de-rated to its normal rating and would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)
b1457	The Tiltonsville – Windsor 138 kV circuit has been derated to its normal rating and would need an electrical clearance study to determine if the emergency rating could be utilized	AEP (100%)
b1458	Install three new 345 kV breakers at Bixby to separate the Marquis 345 kV line and transformer #2. Operate Circleville – Harrison 138 kV and Harrison – Zuber 138 kV up to conductor emergency ratings	AEP (100%)
b1459	Several circuits have been de-rated to their normal conductor ratings and could benefit from electrical clearance studies to determine if the emergency rating could be utilized	AEP (100%)
b1460	Replace 2156 & 2874 risers	AEP (100%)
b1461	Replace meter, metering CTs and associated equipment at the Paden City feeder	AEP (100%)
b1462	Replace relays at both South Cadiz 138 kV and Tidd 138 kV	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1463	Reconductor the Bexley – Groves 138 kV circuit		AEP (100%)
b1464	Corner 138 kV upgrades		AEP (100%)
b1465.1	Add a 3rd 2250 MVA 765/345 kV transformer at Sullivan station		AEC (0.71%) / AEP (75.06%) / APS (1.25%) / BGE (1.81%) / ComEd (5.91%) / Dayton (0.86%) / DL (1.23%) / DPL (0.95%) / Dominion (3.89%) / JCPL (1.58%) / NEPTUNE (0.15%) / HTP (0.07%) / PECO (2.08%) / PEPCO (1.66%) / ECP (0.07%)* / PSEG (2.62%) / RE (0.10%)
b1465.2	Replace the 100 MVAR 765 kV shunt reactor bank on Rockport – Jefferson 765 kV line with a 300 MVAR bank at Rockport Station		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1465.3	Transpose the Rockport – Sullivan 765 kV line and the Rockport – Jefferson 765 kV line	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEP (100%)</p>
b1465.4	Make switching improvements at Sullivan and Jefferson 765 kV stations	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEP (100%)</p>
b1466.1	Create an in and out loop at Adams Station by removing the hard tap that currently exists	AEP (100%)
b1466.2	Upgrade the Adams transformer to 90 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1466.3	At Seaman Station install a new 138 kV bus and two new 138 kV circuit breakers	AEP (100%)
b1466.4	Convert South Central Co-op's New Market 69 kV Station to 138 kV	AEP (100%)
b1466.5	The Seaman – Highland circuit is already built to 138 kV, but is currently operating at 69 kV, which would now increase to 138 kV	AEP (100%)
b1466.6	At Highland Station, install a new 138 kV bus, three new 138 kV circuit breakers and a new 138/69 kV 90 MVA transformer	AEP (100%)
b1466.7	Using one of the bays at Highland, build a 138 kV circuit from Hillsboro – Highland 138 kV, which is approximately 3 miles	AEP (100%)
b1467.1	Install a 14.4 MVar Capacitor Bank at New Buffalo station	AEP (100%)
b1467.2	Reconfigure the 138 kV bus at LaPorte Junction station to eliminate a contingency resulting in loss of two 138 kV sources serving the LaPorte area	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1468.1	Expand Selma Parker Station and install a 138/69/34.5 kV transformer	AEP (100%)
b1468.2	Rebuild and convert 34.5 kV line to Winchester to 69 kV, including Farmland Station	AEP (100%)
b1468.3	Retire the 34.5 kV line from Haymond to Selma Wire	AEP (100%)
b1469.1	Conversion of the Newcomerstown – Cambridge 34.5 kV system to 69 kV operation	AEP (100%)
b1469.2	Expansion of the Derwent 69 kV Station (including reconfiguration of the 69 kV system)	AEP (100%)
b1469.3	Rebuild 11.8 miles of 69 kV line, and convert additional 34.5 kV stations to 69 kV operation	AEP (100%)
b1470.1	Build a new 138 kV double circuit off the Kanawha – Bailysville #2 138 kV circuit to Skin Fork Station	AEP (100%)
b1470.2	Install a new 138/46 kV transformer at Skin Fork	AEP (100%)
b1470.3	Replace 5 Moab's on the Kanawha – Baileysville line with breakers at the Sundial 138 kV station	AEP (100%)
b1471	Perform a sag study on the East Lima – For Lima – Rockhill 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1472	Perform a sag study on the East Lima – Haviland 138 kV line to increase the emergency rating		AEP (100%)
b1473	Perform a sag study on the East New Concord – Muskingum River section of the Muskingum River – West Cambridge 138 kV circuit		AEP (100%)
b1474	Perform a sag study on the Ohio Central – Prep Plant tap 138 kV circuit		AEP (100%)
b1475	Perform a sag study on the S73 – North Delphos 138 kV line to increase the emergency rating		AEP (100%)
b1476	Perform a sag study on the S73 – T131 138 kV line to increase the emergency rating		AEP (100%)
b1477	The Natrium – North Martin 138 kV circuit would need an electrical clearance study among other equipment upgrades		AEP (100%)
b1478	Upgrade Strouds Run – Strouds Tap 138 kV relay and riser		AEP (100%)
b1479	West Hebron station upgrades		AEP (100%)
b1480	Perform upgrades and a sag study on the Corner – Layman 138 kV section of the Corner – Muskingum River 138 kV circuit		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1481	Perform a sag study on the West Lima – Eastown Road – Rockhill 138 kV line and replace the 138 kV risers at Rockhill station to increase the emergency rating	AEP (100%)
b1482	Perform a sag study for the Albion – Robison Park 138 kV line to increase its emergency rating	AEP (100%)
b1483	Sag study 1 mile of the Clinch River – Saltville 138 kV line and replace the risers and bus at Clinch River, Lebanon and Elk Garden Stations	
b1484	Perform a sag study on the Hacienda – Harper 138 kV line to increase the emergency rating	AEP (100%)
b1485	Perform a sag study on the Jackson Road – Concord 183 kV line to increase the emergency rating	AEP (100%)
b1486	The Matt Funk – Poages Mill – Starkey 138 kV line requires	AEP (100%)
b1487	Perform a sag study on the New Carlisle – Trail Creek 138 kV line to increase the emergency rating	AEP (100%)
b1488	Perform a sag study on the Olive – LaPorte Junction 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1489	A sag study must be performed for the 5.40 mile Tristate – Chadwick 138 kV line to determine if a higher emergency rating can be used	AEP (100%)
b1490.1	Establish a new 138/69 kV Butler Center station	AEP (100%)
b1490.2	Build a new 14 mile 138 kV line from Auburn station to Woods Road station VIA Butler Center station	AEP (100%)
b1490.3	Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer	AEP (100%)
b1490.4	Improve the switching arrangement at Kendallville station	AEP (100%)
b1491	Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line	AEP (100%)
b1492	Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR	AEP (100%)
b1493	Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating	AEP (100%)
b1494	Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to increase its emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1495	Add an additional 765/345 kV transformer at Baker Station	AEC (0.41%) / AEP (87.22%) / BGE (1.03%) / ComEd (3.38%) / Dayton (1.23%) / DL (1.46%) / DPL (0.54%) / JCPL (0.90%) / NEPTUNE (0.09%) / HTP (0.04%) / PECO (1.18%) / PEPCO (0.94%) / ECP** (0.04%) / PSEG (1.48%) / RE (0.06%)
b1496	Replace 138 kV bus and risers at Johnson Mountain Station	AEP (100%)
b1497	Replace 138 kV bus and risers at Leesville Station	AEP (100%)
b1498	Replace 138 kV risers at Wurno Station	AEP (100%)
b1499	Perform a sag study on Sporn A – Gavin 138 kV to determine if the emergency rating can be improved	AEP (100%)
b1500	The North East Canton – Wagenhals 138 kV circuit would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)
b1501	The Moseley – Reusens 138 kV circuit requires a sag study to determine if the emergency rating can be utilized to address a thermal loading issue for a category C3	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1502	Reconductor the Conesville East – Conesville Prep Plant Tap 138 kV section of the Conesville – Ohio Central to fix Reliability N-1-1 thermal overloads		AEP (100%)
b1659	Establish Sorenson 345/138 kV station as a 765/345 kV station		AEP (93.61%) / ATSI (2.99%) / ComEd (2.07%) / HTP (0.03%) / PENELEC (0.31%) / ECP** (0.03%) / PSEG (0.92%) / RE (0.04%)
b1659.1	Replace Sorenson 138 kV breaker 'L1'		AEP (100%)
b1659.2	Replace Sorenson 138 kV breaker 'L2' breaker		AEP (100%)
b1659.3	Replace Sorenson 138 kV breaker 'M1'		AEP (100%)
b1659.4	Replace Sorenson 138 kV breaker 'M2'		AEP (100%)
b1659.5	Replace Sorenson 138 kV breaker 'N1'		AEP (100%)
b1659.6	Replace Sorenson 138 kV breaker 'N2'		AEP (100%)
b1659.7	Replace Sorenson 138 kV breaker 'O1'		AEP (100%)
b1659.8	Replace Sorenson 138 kV breaker 'O2'		AEP (100%)
b1659.9	Replace Sorenson 138 kV breaker 'M'		AEP (100%)
b1659.10	Replace Sorenson 138 kV breaker 'N'		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1659.11	Replace Sorenson 138 kV breaker 'O'	AEP (100%)
b1659.12	Replace McKinley 138 kV breaker 'L1'	AEP (100%)
b1659.13	Establish 765 kV yard at Sorenson and install four 765 kV breakers	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (76.55%) / Dayton (7.81%) / DEOK (15.64%)
b1659.14	Build approximately 14 miles of 765 kV line from existing Dumont - Marysville line	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (64.15%) / ATSI (18.55%) / ComEd (4.15%) / Dayton (6.57%) / DL (6.27%) / EKPC (0.31%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1660	Install a 765/500 kV transformer at Cloverdale	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (57.93%) / DEOK (0.07%) / Dominion (0.12%) / EKPC (0.02%) / PEPCO (41.86%)
b1661	Install a 765 kV circuit breaker at Wyoming station	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (100%)
b1662	Rebuild 4 miles of 46 kV line to 138 kV from Pemberton to Cherry Creek	AEP (100%)
b1662.1	Circuit Breakers are installed at Cherry Creek (facing Pemberton) and at Pemberton (facing Tams Mtn. and Cherry Creek)	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1662.2	Install three 138 kV breakers at Grandview Station (facing Cherry Creek, Hinton, and Bradley Stations)	AEP (100%)
b1662.3	Remove Sullivan Switching Station (46 kV)	AEP (100%)
b1663	Install a new 765/138 kV transformer at Jackson Ferry substation	AEP (100%)
b1663.1	Establish a new 10 mile double circuit 138 kV line between Jackson Ferry and Wythe	AEP (100%)
b1663.2	Install 2 765 kV circuit breakers, breaker disconnect switches and associated bus work for the new 765 kV breakers, and new relays for the 765 kV breakers at Jackson's Ferry	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (100%)
b1664	Install switched capacitor banks at Kenwood 138 kV stations	AEP (100%)
b1665	Install a second 138/69 kV transformer at Thelma station	AEP (100%)
b1665.1	Construct a single circuit 69 kV line from West Paintsville to the new Paintsville station	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1665.2	Install new 7.2 MVAR, 46 kV bank at Kenwood Station	AEP (100%)
b1666	Build an 8 breaker 138 kV station tapping both circuits of the Fostoria - East Lima 138 kV line	AEP (90.65%) / Dayton (9.35%)
b1667	Establish Melmore as a switching station with both 138 kV circuits terminating at Melmore. Extend the double circuit 138 kV line from Melmore to Fremont Center	AEP (100%)
b1668	Revise the capacitor setting at Riverside 138 kV station	AEP (100%)
b1669	Capacitor setting changes at Ross 138 kV stations	AEP (100%)
b1670	Capacitor setting changes at Wooster 138 kV station	AEP (100%)
b1671	Install four 138 kV breakers in Danville area	AEP (100%)
b1676	Replace Natrium 138 kV breaker 'G (rehab)'	AEP (100%)
b1677	Replace Huntley 138 kV breaker '106'	AEP (100%)
b1678	Replace Kammer 138 kV breaker 'G'	AEP (100%)
b1679	Replace Kammer 138 kV breaker 'H'	AEP (100%)
b1680	Replace Kammer 138 kV breaker 'J'	AEP (100%)
b1681	Replace Kammer 138 kV breaker 'K'	AEP (100%)
b1682	Replace Kammer 138 kV breaker 'M'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1683	Replace Kammer 138 kV breaker 'N'	AEP (100%)
b1684	Replace Clinch River 138 kV breaker 'E1'	AEP (100%)
b1685	Replace Lincoln 138 kV breaker 'D'	AEP (100%)
b1687	Advance s0251.7 (Replace Corrid 138 kV breaker '104S')	AEP (100%)
b1688	Advance s0251.8 (Replace Corrid 138 kV breaker '104C')	AEP (100%)
b1712.1	Perform sag study on Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1712.2	Rebuild the Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1733	Perform a sag study of the Bluff Point - Jauy 138 kV line. Upgrade breaker, wavetrap, and risers at the terminal ends	AEP (100%)
b1734	Perform a sag study of Randolph - Hodgins 138 kV line. Upgrade terminal equipment	AEP (100%)
b1735	Perform a sag study of R03 - Magely 138 kV line. Upgrade terminal equipment	AEP (100%)
b1736	Perform a sag study of the Industrial Park - Summit 138 kV line	AEP (100%)
b1737	Sag study of Newcomerstown - Hillview 138 kV line. Upgrade -terminal equipment	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1738	Perform a sag study of the Wolf Creek - Layman 138 kV line. - Upgrade terminal equipment including a 138 kV breaker and wavetrap	AEP (100%)
b1739	Perform a sag study of the Ohio Central - West Trinway 138 kV line	AEP (100%)
b1741	Replace Beatty 138 kV breaker '2C(IPP)'	AEP (100%)
b1742	Replace Beatty 138 kV breaker '1E'	AEP (100%)
b1743	Replace Beatty 138 kV breaker '2E'	AEP (100%)
b1744	Replace Beatty 138 kV breaker '3C'	AEP (100%)
b1745	Replace Beatty 138 kV breaker '2W'	AEP (100%)
b1746	Replace St. Claire 138 kV breaker '8'	AEP (100%)
b1747	Replace Cloverdale 138 kV breaker 'C'	AEP (100%)
b1748	Replace Cloverdale 138 kV breaker 'D1'	AEP (100%)
b1780	Install two 138kV breakers and two 138kV circuit switchers at South Princeton Station and one 138kV breaker and one 138kV circuit switcher at Switchback Station	AEP (100%)
b1781	Install three 138 kV breakers and a 138kV circuit switcher at Trail Fork Station in Pineville, WV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1782	Install a 46kV Moab at Montgomery Station facing Carbondale (on the London - Carbondale 46 kV circuit)	AEP (100%)
b1783	Add two 138 kV Circuit Breakers and two 138 kV circuit switchers on the Lonesome Pine - South Bluefield 138 kV line	AEP (100%)
b1784	Install a 52.8 MVAR capacitor bank at the Clifford 138 kV station	AEP (100%)
b1811.1	Perform a sag study of 4 miles of the Waterford - Muskingum line	AEP (100%)
b1811.2	Rebuild 0.1 miles of Waterford - Muskingum 345 kV with 1590 ACSR	AEP (100%)
b1812	Reconductor the AEP portion of the South Canton - Harmon 345 kV with 954 ACSR and upgrade terminal equipment at South Canton. Expected rating is 1800 MVA S/N and 1800 MVA S/E	AEP (100%)
b1817	Install (3) 345 kV circuit breakers at East Elkhart station in ring bus designed as a breaker and half scheme	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1818	Expand the Allen station by installing a second 345/138 kV transformer and adding four 138 kV exits by cutting in the Lincoln - Sterling and Milan - Timber Switch 138 kV double circuit tower line	AEP (88.30%) / ATSI (8.86%) / Dayton (2.84%)
b1819	Rebuild the Robinson Park - Sorenson 138 kV line corridor as a 345 kV double circuit line with one side operated at 345 kV and one side at 138 kV	AEP (87.18%) / ATSI (10.06%) / Dayton (2.76%)
b1859	Perform a sag study for Hancock - Cave Spring - Roanoke 138 kV circuit to reach new SE ratings of 272MVA (Cave Spring-Hancock), 205MVA (Cave Spring-Sunscape), 245MVA (ROANO2-Sunscape)	AEP (100%)
b1860	Perform a sag study on the Crooksville - Spencer Ridge section (14.3 miles) of the Crooksville-Poston-Strouds Run 138 kV circuit to see if any remedial action needed to reach the SE rating (175MVA)	AEP (100%)
b1861	Reconductor 0.83 miles of the Dale - West Canton 138 kV Tie-line and upgrade risers at West Canton 138 kV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1862	Perform a sag study on the Grant - Greentown 138 kV circuit and replace the relay CT at Grant 138 kV station to see if any remedial action needed to reach the new ratings of 251/286MVA	AEP (100%)
b1863	Perform a sag study of the Kammer - Wayman SW 138 kV line to see if any remedial action needed to reach the new SE rating of 284MVA	AEP (100%)
b1864.1	Add two additional 345/138 kV transformers at Kammer	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.2	Add second West Bellaire - Brues 138 kV circuit	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.3	Replace Kammer 138 kV breaker 'E'	AEP (100%)
b1865	Perform a sag study on the Kanawha - Carbondale 138 kV line to see if any remedial action needed to reach the new ratings of 251/335MVA	AEP (100%)
b1866	Perform a sag study on the Clinch River-Lock Hart-Dorton 138kV line,increase the Relay Compliance Trip Limit at Clinch River on the C.R.-Dorton 138kV line to 310 and upgrade the risers with 1590ACSR	AEP (100%)
b1867	Perform a sag study on the Newcomerstown - South Coshocton 138 kV line to see if any remedial action is needed to reach the new SE rating of 179MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1868	Perform sag study on the East Lima - new Liberty 138 kV line to see if any remedial action is needed to reach the new SE rating of 219MVA	AEP (100%)
b1869	Perform a sag study of the Ohio Central - South Coshocton 138 kV circuit to see if any remedial action needed to reach the new SE ratings of 250MVA	AEP (100%)
b1870	Replace the Ohio Central transformer #1 345/138/12 kV 450 MVA for a 345/138/34.5 kV 675 MVA transformer	AEP (68.16%) / ATSI (25.27%) / Dayton (3.88%) / PENELEC (1.59%) / DEOK (1.10%)
b1871	Perform a sag study on the Central - West Coshocton 138 kV line (improving the emergency rating of this line to 254 MVA)	AEP (100%)
b1872	Add a 57.6 MVA capacitor bank at East Elkhart 138 kv station in Indiana	AEP (100%)
b1873	Install two 138 kV circuit breakers at Cedar Creek Station and primary side circuit switcher on the 138/69/46 kV transformer	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1874	Install two 138 kV circuit breakers and one 138 kV circuit switcher at Magely 138 kV station in Indiana	AEP (100%)
b1875	Build 25 miles of new 138 kV line from Bradley Station through Tower 117 Station and terminating at McClung 138 kV station. Existing 69 kV distribution transformers will be replaced with 138 kV transformers	AEP (100%)
b1876	Install a 14.4 MVar capacitor bank at Capital Avenue (AKA Currant Road) 34.5 kV bus	AEP (100%)
b1877	Relocate 138 kV Breaker G to the West Kingsport - Industry Drive 138 kV line and Remove 138 kV MOAB	AEP (100%)
b1878	Perform a sag study on the Lincoln - Robinson Park 138 kV line (Improve the emergency rating to 244 MVA)	AEP (100%)
b1879	Perform a sag study on the Hansonville - Meadowview 138 kV line (Improve the emergency rating to 245 MVA)	AEP (100%)
b1880	Rebuild the 15 miles of the Moseley - Roanoke 138 kV line. This project would consist of rebuilding both circuits on the double circuit line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1881	Replace existing 600 Amp switches, station risers and increase the CT ratios associated with breaker 'G' at Sterling 138 kV Station. It will increase the rating to 296 MVA S/N and 384 MVA S/E	AEP (100%)
b1882	Perform a sag study on the Bluff Point - Randolph 138 kV line to see if any remedial action needed to reach the new SE rating of 255 MVA	AEP (100%)
b1883	Switch the breaker position of transformer #1 and SW Lima at East Lima 345 kV bus	AEP (100%)
b1884	Perform a sag study on Strawton station - Fisher Body - Deer Creek 138 kV line to see if any remedial action needed to reach the new SE rating of 250 MVA	AEP (100%)
b1887	Establish a new 138/69 kV source at Carrollton and construct two new 69 kV lines from Carrollton to tie into the Dennison - Miller SW 69 kV line and to East Dover 69 kV station respectively	AEP (100%)
b1888	Install a 69 kV line breaker at Blue Pennant 69 kV Station facing Bim Station and 14.4 MVar capacitor bank	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1889	Install a 43.2 MVAR capacitor bank at Hinton 138 kV station (APCO WV)	AEP (100%)
b1901	Rebuild the Ohio Central - West Trinway (4.84 miles) section of the Academia - Ohio Central 138 kV circuit. Upgrade the Ohio Central riser, Ohio Central switch and the West Trinway riser	AEP (100%)
b1904.1	Construct new 138/69 Michiana Station near Bridgman by tapping the new Carlisle - Main Street 138 kV and the Bridgman - Buchanan Hydro 69 kV line	AEP (100%)
b1904.2	Establish a new 138/12 kV New Galien station by tapping the Olive - Hickory Creek 138 kV line	AEP (100%)
b1904.3	Retire the existing Galien station and move its distribution load to New Galien station. Retire the Buchanan Hydro - New Carlisle 34.5 kV line	AEP (100%)
b1904.4	Implement an in and out scheme at Cook 69 kV by eliminating the Cook 69 kV tap point and by installing two new 69 kV circuit breakers	AEP (100%)
b1904.5	Rebuild the Bridgman - Cook 69 kV and the Derby - Cook 69 kV lines	AEP (100%)
b1946	Perform a sag study on the Brues – West Bellaire 138 kV line	AEP (100%)
b1947	A sag study of the Dequine - Meadowlake 345 kV line #1 line may improve the emergency rating to 1400 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1948	Establish a new 765/345 interconnection at Sporn. Install a 765/345 kV transformer at Mountaineer and build ¾ mile of 345 kV to Sporn	ATSI (61.08%) / DL (21.87%) / Dominion (13.97%) / PENELEC (3.08%)
b1949	Perform a sag study on the Grant Tap – Deer Creek 138 kV line and replace bus and risers at Deer Creek station	AEP (100%)
b1950	Perform a sag study on the Kammer – Ormet 138 kV line of the conductor section	AEP (100%)
b1951	Perform a sag study of the Maddox- Convoy 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1952	Perform a sag study of the Maddox – T130 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1953	Perform a sag study of the Meadowlake - Olive 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1954	Perform a sag study on the Milan - Harper 138 kV line and replace bus and switches at Milan Switch station	AEP (100%)
b1955	Perform a sag study of the R-049 - Tillman 138 kV line may improve the emergency rating to 245 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1956	Perform a sag study of the Tillman - Dawkins 138 kV line may improve the emergency rating to 245 MVA	AEP (100%)
b1957	Terminate Transformer #2 at SW Lima in a new bay position	AEP (69.41%) / ATSI (23.11%) / ECP** (0.17%) / HTP (0.19%) / PENELEC (2.42%) / PSEG (4.52%) / RE (0.18%)
b1958	Perform a sag study on the Brookside - Howard 138 kV line and replace bus and risers at AEP Howard station	AEP (100%)
b1960	Sag Study on 7.2 miles SE Canton-Canton Central 138kV ckt	AEP (100%)
b1961	Sag study on the Southeast Canton – Sunnyside 138kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1962	Add four 765 kV breakers at Kammer	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEP (100%)</p>
b1963	Build approximately 1 mile of circuit comprising of 2-954 ACSR to get the rating of Waterford-Muskinum 345 kV higher	AEP (100%)
b1970	Reconductor 13 miles of the Kammer – West Bellaire 345kV circuit	APS (33.51%) / ATSI (32.21%) / DL (18.64%) / Dominion (6.01%) / ECP** (0.10%) / HTP (0.11%) / JCPL (1.68%) / Neptune* (0.18%) / PENELEC (4.58%) / PSEG (2.87%) / RE (0.11%)
b1971	Perform a sag study to improve the emergency rating on the Bridgville – Chandlersville 138 kV line	AEP (100%)
b1972	Replace disconnect switch on the South Canton 765/345 kV transformer	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1973	Perform a sag study to improve the emergency rating on the Carrollton – Sunnyside 138 kV line	AEP (100%)
b1974	Perform a sag study to improve the emergency rating on the Bethel Church – West Dover 138 kV line	AEP (100%)
b1975	Replace a switch at South Millersburg switch station	AEP (100%)
b2017	Reconductor or rebuild Sporn - Waterford - Muskingum River 345 kV line	ATSI (37.04%) / AEP (34.35%) / DL (10.41%) / Dominion (6.19%) / APS (3.94%) / PENELEC (3.09%) / JCPL (1.39%) / Dayton (1.20%) / Neptune* (0.14%) / HTP (0.09%) / ECP** (0.08%) / PSEG (2.00%) / RE (0.08%)
b2018	Loop Conesville - Bixby 345 kV circuit into Ohio Central	ATSI (58.58%) / AEP (14.16%) / APS (12.88%) / DL (7.93%) / PENELEC (5.73%) / Dayton (0.72%)
b2019	Establish Burger 345/138 kV station	AEP (93.74%) / APS (4.40%) / DL (1.11%) / ATSI (0.74%) / PENELEC (0.01%)
b2020	Rebuild Amos - Kanawah River 138 kV corridor	AEP (88.39%) / APS (7.12%) / ATSI (2.89%) / DEOK (1.58%) / PEPCO (0.02%)
b2021	Add 345/138 transformer at Sporn, Kanawah River & Muskingum River stations	AEP (91.92%) / DEOK (3.60%) / APS (2.19%) / ATSI (1.14%) / DL (1.08%) / PEPCO (0.04%) / BGE (0.03%)
b2021.1	Replace Kanawah 138 kV breaker 'L'	AEP (100%)
b2021.2	Replace Muskingum 138 kV breaker 'HG'	AEP (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2021.3	Replace Muskingum 138 kV breaker 'HJ'	AEP (100%)
b2021.4	Replace Muskingum 138 kV breaker 'HE'	AEP (100%)
b2021.5	Replace Muskingum 138 kV breaker 'HD'	AEP (100%)
b2021.6	Replace Muskingum 138 kV breaker 'HF'	AEP (100%)
b2021.7	Replace Muskingum 138 kV breaker 'HC'	AEP (100%)
b2021.8	Replace Sporn 138 kV breaker 'D1'	AEP (100%)
b2021.9	Replace Sporn 138 kV breaker 'D2'	AEP (100%)
b2021.10	Replace Sporn 138 kV breaker 'F1'	AEP (100%)
b2021.11	Replace Sporn 138 kV breaker 'F2'	AEP (100%)
b2021.12	Replace Sporn 138 kV breaker 'G'	AEP (100%)
b2021.13	Replace Sporn 138 kV breaker 'G2'	AEP (100%)
b2021.14	Replace Sporn 138 kV breaker 'N1'	AEP (100%)
b2021.15	Replace Kanawah 138 kV breaker 'M'	AEP (100%)
b2022	Terminate Tristate - Kyger Creek 345 kV line at Sporn	AEP (97.99%) / DEOK (2.01%)
b2027	Perform a sag study of the Tidd - Collier 345 kV line	AEP (100%)

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\*\*East Coast Power, L.L.C.

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2028	Perform a sag study on East Lima - North Woodcock 138 kV line to improve the rating	AEP (100%)
b2029	Perform a sag study on Bluebell - Canton Central 138 kV line to improve the rating	AEP (100%)
b2030	Install 345 kV circuit breakers at West Bellaire	AEP (100%)
b2031	Sag study on Tilton - W. Bellaire section 1 (795 ACSR), about 12 miles	AEP (100%)
b2032	Rebuild 138 kV Elliot tap - Poston line	ATSI (73.02%) / Dayton (19.39%) / DL (7.59%)
b2033	Perform a sag study of the Brues - W. Bellaire 138 kV line	AEP (100%)
b2046	Adjust tap settings for Muskingum River transformers	AEP (100%)
b2047	Replace relay at Greenlawn	AEP (100%)
b2048	Replace both 345/138 kV transformers with one bigger transformer	AEP (92.49%) / Dayton (7.51%)
b2049	Replace relay	AEP (100%)
b2050	Perform sag study	AEP (100%)
b2051	Install 3 138 kV breakers and a circuit switcher at Dorton station	AEP (100%)
b2052	Replace transformer	AEP (67.17%) / ATSI (27.37%) / Dayton (3.73%) / PENELEC (1.73%)
b2054	Perform a sag study of Sporn - Rutland 138 kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2069	Replace George Washington 138 kV breaker 'A' with 63kA rated breaker	AEP (100%)
b2070	Replace Harrison 138 kV breaker '6C' with 63kA rated breaker	AEP (100%)
b2071	Replace Lincoln 138 kV breaker 'L' with 63kA rated breaker	AEP (100%)
b2072	Replace Natrum 138 kV breaker 'T' with 63kA rated breaker	AEP (100%)
b2073	Replace Darrah 138 kV breaker 'B' with 63kA rated breaker	AEP (100%)
b2074	Replace Wyoming 138 kV breaker 'G' with 80kA rated breaker	AEP (100%)
b2075	Replace Wyoming 138 kV breaker 'G1' with 80kA rated breaker	AEP (100%)
b2076	Replace Wyoming 138 kV breaker 'G2' with 80kA rated breaker	AEP (100%)
b2077	Replace Wyoming 138 kV breaker 'H' with 80kA rated breaker	AEP (100%)
b2078	Replace Wyoming 138 kV breaker 'H1' with 80kA rated breaker	AEP (100%)
b2079	Replace Wyoming 138 kV breaker 'H2' with 80kA rated breaker	AEP (100%)
b2080	Replace Wyoming 138 kV breaker 'J' with 80kA rated breaker	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2081	Replace Wyoming 138 kV breaker 'J1' with 80kA rated breaker	AEP (100%)
b2082	Replace Wyoming 138 kV breaker 'J2' with 80kA rated breaker	AEP (100%)
b2083	Replace Natrum 138 kV breaker 'K' with 63kA rated breaker	AEP (100%)
b2084	Replace Tanner Creek 345 kV breaker 'P' with 63kA rated breaker	AEP (100%)
b2085	Replace Tanner Creek 345 kV breaker 'P2' with 63kA rated breaker	AEP (100%)
b2086	Replace Tanner Creek 345 kV breaker 'Q1' with 63kA rated breaker	AEP (100%)
b2087	Replace South Bend 138 kV breaker 'T' with 63kA rated breaker	AEP (100%)
b2088	Replace Tidd 138 kV breaker 'L' with 63kA rated breaker	AEP (100%)
b2089	Replace Tidd 138 kV breaker 'M2' with 63kA rated breaker	AEP (100%)
b2090	Replace McKinley 138 kV breaker 'A' with 40kA rated breaker	AEP (100%)
b2091	Replace West Lima 138 kV breaker 'M' with 63kA rated breaker	AEP (100%)
b2092	Replace George Washington 138 kV breaker 'B' with 63kA rated breaker	AEP (100%)

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\*\*East Coast Power, L.L.C.

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2093	Replace Turner 138 kV breaker 'W' with 63kA rated breaker	AEP (100%)
b2135	Build a new 138 kV line from Falling Branch to Merrimac and add a 138/69 kV transformer at Merrimac Station	AEP (100%)
b2160	Add a fourth circuit breaker to the station being built for the U4-038 project (Conelley), rebuild U4-038 - Grant Tap line as double circuit tower line	AEP (100%)
b2161	Rebuild approximately 20 miles of the Allen - S073 double circuit 138 kV line (with one circuit from Allen - Tillman - Timber Switch - S073 and the other circuit from Allen - T-131 - S073) utilizing 1033 ACSR	AEP (100%)
b2162	Perform a sag study to improve the emergency rating of the Belpre - Degussa 138 kV line	AEP (100%)
b2163	Replace breaker and wavetrapp at Jay 138 kV station	AEP (100%)

\*Neptune Regional Transmission System, LLC

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## SCHEDULE 12 – APPENDIX

### (20) Virginia Electric and Power Company

Required Transmission Enhancements    Annual Revenue Requirement\*\*\* Responsible Customer(s)

b0217	Upgrade Mt. Storm - Doubs 500kV		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (22.34%) / BGE (11.58%) /  Dominion (52.51%) / PEPCO  (13.57%)</p>
b0222	Install 150 MVAR capacitor at Loudoun 500 kV		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (88.62%) / PEPCO  (11.38%)</p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

\*\*\* The Annual Revenue Requirement for all Virginia Electric and Power Company projects in this Section 20 shall be as specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B.



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0223	Install 150 MVAR capacitor at Asburn 230 kV		Dominion (100%)
b0224	Install 150 MVAR capacitor at Dranesville 230 kV		Dominion (100%)
b0225	Install 33 MVAR capacitor at Possum Pt. 115 kV		Dominion (100%)
b0226	Install 500/230 kV transformer at Clifton and Clifton 500 kV 150 MVAR capacitor	As specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B	APS (3.69%) / BGE (3.54%) / Dominion (85.73%) / PEPSCO (7.04%)
b0227	Install 500/230 kV transformer at Bristers; build new 230 kV Bristers-Gainsville circuit, upgrade two Loudoun-Brambleton circuits		AEC (0.71%) / APS (3.35%) / BGE (10.92%) / ConEd (0.10%) / DPL (1.66%) / Dominion (67.31%) / ME (0.89%) / PECO (2.33%) / PEPSCO (12.19%) / PPL (0.54%)
b0227.1	Loudoun Sub – upgrade 6-230 kV breakers		Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0231	Install 500 kV breakers & 500 kV bus work at Suffolk		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (100%)
b0231.2	Install 500/230 kV Transformer, 230 kV breakers, & 230 kV bus work at Suffolk		Dominion (100%)
b0232	Install 150 MVAR capacitor at Lynnhaven 230 kV		Dominion (100%)
b0233	Install 150 MVAR capacitor at Landstown 230 kV		Dominion (100%)
b0234	Install 150 MVAR capacitor at Greenwich 230 kV		Dominion (100%)
b0235	Install 150 MVAR capacitor at Fentress 230 kV		Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0307	Reconductor Endless Caverns – Mt. Jackson 115 kV		Dominion (100%)
b0308	Replace L breaker and switches at Endless Caverns 115 kV		Dominion (100%)
b0309	Install SPS at Earleys 115 kV		Dominion (100%)
b0310	Reconductor Club House – South Hill and Chase City – South Hill 115 kV		Dominion (100%)
b0311	Reconductor Idylwood to Arlington 230 kV		Dominion (100%)
b0312	Reconductor Gallows to Ox 230 kV		Dominion (100%)
b0325	Install a 2 <sup>nd</sup> Everetts 230/115 kV transformer		Dominion (100%)
b0326	Uprate/resag Remington-Brandywine-Culppr 115 kV		Dominion (100%)
b0327	Build 2 <sup>nd</sup> Harrisonburg – Valley 230 kV		APS (19.79%) / Dominion (76.18%) / PEPCO (4.03%)
b0328.1	Build new Meadow Brook – Loudoun 500 kV circuit (30 of 50 miles)		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (88.62%) / PEPCO (11.38%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.3	Upgrade Mt. Storm 500 kV substation	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0328.4	Upgrade Loudoun 500 kV substation	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (88.62%) / PEPCO (11.38%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit		<b>Load Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (100%)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit		Dominion (100%)††
b0329.1	Replace Thole Street 115 kV breaker ‘48T196’		Dominion (100%)
b0329.2	Replace Chesapeake 115 kV breaker ‘T242’		Dominion (100%)
b0329.3	Replace Chesapeake 115 kV breaker ‘8722’		Dominion (100%)
b0329.4	Replace Chesapeake 115 kV breaker ‘16422’		Dominion (100%)
b0330	Install Crewe 115 kV breaker and shift load from line 158 to 98		Dominion (100%)
b0331	Upgrade/resag Shell Bank – Whealton 115 kV (Line 165)		Dominion (100%)

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†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0332	Uprate/resag Chesapeake – Cradock 115 kV	Dominion (100%)
b0333	Replace wave trap on Elmont – Replace (Line #231)	Dominion (100%)
b0334	Uprate/resag Iron Bridge-Walmsley-Southwest 230 kV	Dominion (100%)
b0335	Build Chase City – Clarksville 115 kV	Dominion (100%)
b0336	Reconductor one span of Chesapeake – Dozier 115 kV close to Dozier substation	Dominion (100%)
b0337	Build Lexington 230 kV ring bus	Dominion (100%)
b0338	Replace Gordonsville 230/115 kV transformer for larger one	Dominion (100%)
b0339	Install Breaker at Doms 230 kV Sub	Dominion (100%)
b0340	Reconductor one span Peninsula – Magruder 115 kV close to Magruder substation	Dominion (100%)
b0341	Install a breaker at Northern Neck 115 kV	Dominion (100%)
b0342	Replace Trowbridge 230/115 kV transformer	Dominion (100%)
b0403	2 <sup>nd</sup> Doms 500/230 kV transformer addition	APS (3.35%) / BGE (4.22%) / DPL (1.10%) / Dominion (83.94%) / PEPCO (7.39%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0412	Retension Pruntytown – Mt. Storm 500 kV to a 3502 MVA rating	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> APS (46.82%) / PEPCO (53.18%)
b0450	Install 150 MVAR Capacitor at Fredricksburg 230 kV	Dominion (100%)
b0451	Install 25 MVAR Capacitor at Somerset 115 kV	Dominion (100%)
b0452	Install 150 MVAR Capacitor at Northwest 230 kV	Dominion (100%)
b0453.1	Convert Remington – Sowego 115 kV to 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.2	Add Sowego – Gainesville 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.3	Add Sowego 230/115 kV transformer	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0454	Reconductor 2.4 miles of Newport News – Chuckatuck 230 kV	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0455	Add 2 <sup>nd</sup> Endless Caverns 230/115 kV transformer	APS (32.70%) / BGE (7.01%) / DPL (1.80%) / Dominion (50.82%) / PEPCO (7.67%)
b0456	Reconductor 9.4 miles of Edinburg – Mt. Jackson 115 kV	APS (33.69%) / BGE (12.18%) / Dominion (40.08%) / PEPCO (14.05%)
b0457	Replace both wave traps on Doods – Lexington 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> DEOK (1.12%) / Dominion (85.91%) / EKPC (0.33%) / PEPCO (12.64%)
b0467.2	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.66%) / BGE (22.09%) / ConEd (0.18%) / DPL (3.69%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.53%) / PEPCO (41.78%) / PPL (2.07%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.6	Replace Mount Storm 500 kV breaker 55072	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0492.7	Replace Mount Storm 500 kV breaker 55172	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.8	Replace Mount Storm 500 kV breaker H1172-2	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0492.9	Replace Mount Storm 500 kV breaker G2T550	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.10	Replace Mount Storm 500 kV breaker G2T554		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0492.11	Replace Mount Storm 500 kV breaker G1T551		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0492.12	Upgrade nameplate rating of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.5	Advance n0716 (Ox - Replace 230kV breaker L242)	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.6	Advance n0717 (Possum Point - Replace 230kV breaker SC192)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE  (34.52%) / DPL (14.68%) /  Dominion (0.30%) / ECP (0.38%) /  JCPL (9.43%) / ME (2.16%) /  NEPTUNE (0.90%) / PECO  (10.51%) / PEPCO (2.44%) / PPL  (5.50%) / PSEG (14.37%) / RE  (0.54%)</p>
b0583	Install dual primary protection schemes on Gosport lines 62 and 51 at the remote terminals (Chesapeake on the 62 line and Reeves Ave on the 51 line)	Dominion (100%)
b0756	Install a second 500/115 kV autotransformer at Chancellor 500 kV	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0756.1	Install two 500 kV breakers at Chancellor 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0757	Reconductor one mile of Chesapeake – Reeves Avenue 115 kV line	Dominion (100%)
b0758	Install a second Fredericksburg 230/115 kV autotransformer	Dominion (100%)
b0760	Build 115 kV line from Kitty Hawk to Colington 115 kV (Colington on the existing line and Nag's Head and Light House DP on new line)	Dominion (100%)
b0761	Install a second 230/115 kV transformer at Possum Point	Dominion (100%)
b0762	Build a new Elko station and transfer load from Turner and Providence Forge stations	Dominion (100%)
b0763	Rebuild 17.5 miles of the line for a new summer rating of 262 MVA	Dominion (100%)
b0764	Increase the rating on 2.56 miles of the line between Greenwich and Thompson Corner; new rating to be 257 MVA	Dominion (100%)
b0765	Add a second Bull Run 230/115 kV autotransformer	Dominion (100%)
b0766	Increase the rating of the line between Loudoun and Cedar Grove to at least 150 MVA	Dominion (100%)
b0767	Extend the line from Old Church – Chickahominy 230 kV	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0768	Loop line #251 Idylwood – Arlington into the GIS sub	Dominion (100%)
b0769	Re-tension 15 miles of the line for a new summer rating of 216 MVA	Dominion (100%)
b0770	Add a second 230/115 kV autotransformer at Lanexa	Dominion (100%)
b0770.1	Replace Lanexa 115 kV breaker '8532'	Dominion (100%)
b0770.2	Replace Lanexa 115 kV breaker '9232'	Dominion (100%)
b0771	Build a parallel Chickahominy – Lanexa 230 kV line	Dominion (100%)
b0772	Install a second Elmont 230/115 kV autotransformer	Dominion (100%)
b0772.1	Replace Elmont 115 kV breaker '7392'	Dominion (100%)
b0774	Install a 33 MVAR capacitor at Bremo 115 kV	Dominion (100%)
b0775	Reconductor the Greenwich – Virginia Beach line to bring it up to a summer rating of 261 MVA; Reconductor the Greenwich – Amphibious Base line to bring it up to 291 MVA	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0776	Re-build Trowbridge – Winfall 115 kV	Dominion (100%)
b0777	Terminate the Thelma – Carolina 230 kV circuit into Lakeview 230 kV	Dominion (100%)
b0778	Install 29.7 MVAR capacitor at Lebanon 115 kV	Dominion (100%)
b0779	Build a new 230 kV line from Yorktown to Hayes but operate at 115 kV initially	Dominion (100%)
b0780	Reconductor Chesapeake – Yadkin 115 kV line	Dominion (100%)
b0781	Reconductor and replace terminal equipment on line 17 and replace the wave trap on line 88	Dominion (100%)
b0782	Install a new 115 kV capacitor at Dupont Waynesboro substation	Dominion (100%)
b0784	Replace wave traps on North Anna to Ladysmith 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)
b0785	Rebuild the Chase City – Crewe 115 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0786	Reconductor the Moran DP – Crewe 115 kV segment	Dominion (100%)
b0787	Upgrade the Chase City – Twitty’s Creek 115 kV segment	Dominion (100%)
b0788	Reconductor the line from Farmville – Pamplin 115 kV	Dominion (100%)
b0793	Close switch 145T183 to network the lines. Rebuild the section of the line #145 between Possum Point – Minnieville DP 115 kV	Dominion (100%)
b0815	Replace Elmont 230 kV breaker '22192'	Dominion (100%)
b0816	Replace Elmont 230 kV breaker '21692'	Dominion (100%)
b0817	Replace Elmont 230 kV breaker '200992'	Dominion (100%)
b0818	Replace Elmont 230 kV breaker '2009T2032'	Dominion (100%)
b0837	At Mt. Storm, replace the existing MOD on the 500 kV side of the transformer with a circuit breaker	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0888	Replace Loudoun 230 kV Cap breaker 'SC352'		Dominion (100%)
b0892	Replace Chesapeake 115 kV breaker SX522		Dominion (100%)
b0893	Replace Chesapeake 115 kV breaker T202		Dominion (100%)
b0894	Replace Possum Point 115 kV breaker SX-32		Dominion (100%)
b0895	Replace Possum Point 115 kV breaker L92-1		Dominion (100%)
b0896	Replace Possum Point 115 kV breaker L92-2		Dominion (100%)
b0897	Replace Suffolk 115 kV breaker T202		Dominion (100%)
b0898	Replace Peninsula 115 kV breaker SC202		Dominion (100%)
b0921	Reconductor Brambleton - Cochran Mill 230 kV line with 201 Yukon conductor		Dominion (100%)
b0923	Install 50-100 MVAR variable reactor banks at Carson 230 kV		Dominion (100%)
b0924	Install 50-100 MVAR variable reactor banks at Doods 230 kV		Dominion (100%)
b0925	Install 50-100 MVAR variable reactor banks at Garrisonville 230 kV		Dominion (100%)
b0926	Install 50-100 MVAR variable reactor banks at Hamilton 230 kV		Dominion (100%)
b0927	Install 50-100 MVAR variable reactor banks at Yadkin 230 kV		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0928	Install 50-100 MVAR variable reactor banks at Carolina, Doods, Everetts, Idylwood, N. Alexandria, N. Anna, Suffolk and Valley 230 kV substations	Dominion (100%)
b1056	Build a 2nd Shawboro – Elizabeth City 230kV line	Dominion (100%)
b1058	Add a third 230/115 kV transformer at Suffolk substation	Dominion (100%)
b1058.1	Replace Suffolk 115 kV breaker 'T122' with a 40 kA breaker	Dominion (100%)
b1058.2	Convert Suffolk 115 kV straight bus to a ring bus for the three 230/115 kV transformers and three 115 kV lines	Dominion (100%)
b1071	Rebuild the existing 115 kV corridor between Landstown - Va Beach Substation for a double circuit arrangement (230 kV & 115 kV)	Dominion (100%)
b1076	Replace existing North Anna 500-230kV transformer with larger unit	Dominion (100%)
b1087	Replace Cannon Branch 230-115 kV with larger transformer	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1088	Build new Radnor Heights Sub, add new underground circuit from Ballston - Radnor Heights, Tap the Glebe - Davis line and create circuits from Davis - Radnor Heights and Glebe - Radnor Heights		Dominion (100%)
b1089	Install 2nd Burke to Sideburn 230 kV underground cable		Dominion (100%)
b1090	Install a 150 MVAR 230 kV capacitor and one 230 kV breaker at Northwest		Dominion (100%)
b1095	Reconductor Chase City 115 kV bus and add a new tie breaker		Dominion (100%)
b1096	Construct 10 mile double ckt. 230kV tower line from Loudoun to Middleburg		Dominion (100%)
b1102	Replace Bremo 115 kV breaker '9122'		Dominion (100%)
b1103	Replace Bremo 115 kV breaker '822'		Dominion (100%)
b1172	Build a 4-6 mile long 230 kV line from Hopewell to Bull Hill (Ft Lee) and install a 230-115 kV Tx		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1188	Build new Brambleton 500 kV three breaker ring bus connected to the Loudoun to Pleasant View 500 kV line	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> Dominion (100%)
b1188.1	Replace Loudoun 230 kV breaker '200852' with a 63 kA breaker	Dominion (100%)
b1188.2	Replace Loudoun 230 kV breaker '2008T2094' with a 63 kA breaker	Dominion (100%)
b1188.3	Replace Loudoun 230 kV breaker '204552' with a 63 kA breaker	Dominion (100%)
b1188.4	Replace Loudoun 230 kV breaker '209452' with a 63 kA breaker	Dominion (100%)
b1188.5	Replace Loudoun 230 kV breaker 'WT2045' with a 63 kA breaker	Dominion (100%)
b1188.6	Install one 500/230 kV transformer and two 230 kV breakers at Brambleton	AEC (0.22%) / BGE (7.90%) / DPL (0.59%) / Dominion (75.58%) / ME (0.22%) / PECO (0.73%) / PEPCO (14.76%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1224	Install 2nd Clover 500/230 kV transformer and a 150 MVar capacitor		BGE (7.56%) / DPL (1.03%) / Dominion (78.21%) / ME (0.77%) / PECO (1.39%) / PEPCO (11.04%)
b1225	Replace Yorktown 115 kV breaker 'L982-1'		Dominion (100%)
b1226	Replace Yorktown 115 kV breaker 'L982-2'		Dominion (100%)
b1279	Line #69 Uprate – Increase rating on Locks – Purdy 115 kV to serve additional load at the Reams delivery point		Dominion (100%)
b1306	Reconfigure 115 kV bus at Endless Caverns substation such that the existing two 230/115 kV transformers at Endless Caverns operate in		Dominion (100%)
b1307	Install a 2nd 230/115 kV transformer at Northern Neck Substation		Dominion (100%)
b1308	Improve LSE's power factor in zone to .973 PF, adjust LTC's at Gordonsville and Remington, move existing shunt capacitor banks		Dominion (100%)
b1309	Install a 230 kV line from Lakeside to Northwest utilizing the idle line and 60 line ROW's and reconductor the existing 221 line between Elmont and Northwest		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1310 Install a 115 kV breaker at Broadnax substation on the South Hill side of Broadnax		Dominion (100%)
b1311 Install a 230 kV 3000 amp breaker at Cranes Corner substation to sectionalize the 2104 line into two lines		Dominion (100%)
b1312 Loop the 2054 line in and out of Hollymeade and place a 230 kV breaker at Hollymeade. This creates two lines: Charlottesville - Hollymeade		Dominion (100%)
b1313 Resag wire to 125C from Chesterfield – Shockoe and replace line switch 1799 with 1200 amp switch. The new rating would be 231 MVA.		Dominion (100%)
b1314 Rebuild the 6.8 mile line #100 from Chesterfield to Harrowgate 115 kV for a minimum 300 MBA rating		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1315	Convert line #64 Trowbridge to Winfall to 230 kV and install a 230 kV capacitor bank at Winfall		Dominion (100%)
b1316	Rebuild 10.7 miles of 115 kV line #80, Battleboro – Heartsease DP		Dominion (100%)
b1317	LSE load power factor on the #47 line will need to meet MOA requirements of .973 in 2015 to further resolve this issue through at least 2019		Dominion (100%)
b1318	Install a 115 kV bus tie breaker at Acca substation between the Line #60 and Line #95 breakers		Dominion (100%)
b1319	Resag line #222 to 150 C and upgrade any associated equipment to a 2000A rating to achieve a 706 MVA summer line rating		Dominion (100%)
b1320	Install a 230 kV, 150 MVAR capacitor bank at Southwest substation		Dominion (100%)
b1321	Build a new 230 kV line North Anna – Oak Green and install a 224 MVA 230/115 kV transformer at Oak Green		BGE (0.85%) / Dominion (97.96%) / PEPCO (1.19%)
b1322	Rebuild the 39 Line (Dooms – Sherwood) and the 91 Line (Sherwood – Bremono)		Dominion (100%)
b1323	Install a 224 MVA 230/115 kV transformer at Staunton. Rebuild the 115 kV line #43 section Staunton - Verona		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1324	Install a 115 kV capacitor bank at Oak Ridge. Install a capacitor bank at New Bohemia. Upgrade 230/34.5 kV transformer #3 at Kings Fork	Dominion (100%)
b1325	Rebuild 15 miles of line #2020 Winfall – Elizabeth City with a minimum 900 MVA rating	Dominion (100%)
b1326	Install a third 168 MVA 230/115 kV transformer at Kitty Hawk with a normally open 230 kV breaker and a low side 115 kV breaker	Dominion (100%)
b1327	Rebuild the 20 mile section of line #22 between Kerr Dam – Eatons Ferry substations	Dominion (100%)
b1328	Uprate the 3.63 mile line section between Possum and Dumfries substations, replace the 1600 amp wave trap at Possum Point	AEC (0.66%) / APS (3.59%) / DPL (0.91%) / Dominion (92.94%) / PECO (1.90%)
b1329	Install line-tie breakers at Sterling Park substation and BECO substation	Dominion (100%)
b1330	Install a five breaker ring bus at the expanded Dulles substation to accommodate the existing Dulles Arrangement and support the Metrorail	Dominion (100%)
b1331	Build a 230 kV line from Shawboro to Aydlett tap and connect Aydlett to the new line	Dominion (100%)
b1332	Build Cannon Branch to Nokesville 230 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1333 Advance n1728 (Replace Possum Point 230 kV breaker H9T237 with an 80 kA breaker)		Dominion (100%)
b1334 Advance n1748 (Replace Ox 230 kV breaker 22042 with a 63 kA breaker)		Dominion (100%)
b1335 Advance n1749 (Replace Ox 230 kV breaker 220T2603 with a 63 kA breaker)		Dominion (100%)
b1336 Advance n1750 (Replace Ox 230 kV breaker 24842 with a 63 kA breaker)		Dominion (100%)
b1337 Advance n1751 (Replace Ox 230 kV breaker 248T2013 with a 63 kA breaker)		Dominion (100%)
b1503.1 Loop Line #2095 in and out of Waxpool approximately 1.5 miles		Dominion (100%)
b1503.2 Construct a new 230kV line from Brambleton to BECO Substation of approximately 11 miles with approximately 10 miles utilizing the vacant side of existing Line #2095 structures		Dominion (100%)
b1503.3 Install a one 230 kV breaker, Future 230 kV ring-bus at Waxpool Substation		Dominion (100%)
b1503.4 The new Brambleton - BECO line will feed Shellhorn Substation load and Greenway TX's #2&3 load		Dominion (100%)

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**Virginia Electric and Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1506.1	At Gainesville Substation, create two 115 kV straight-buses with a normally open tie-breaker	Dominion (100%)
b1506.2	Upgrade Line 124 (radial from Loudoun) to a minimum continuous rating of 500 MVA and network it into the 115 kV bus feeding NOVEC's DP at Gainesville	Dominion (100%)
b1506.3	Install two additional 230 kV breakers in the ring at Gainesville (may require substation expansion) to accommodate conversion of NOVEC's Gainesville to Wheeler line	Dominion (100%)
b1506.4	Convert NOVEC's Gainesville-Wheeler line from 115 kV to 230 kV (will require Gainesville DP Upgrade replacement of three transformers total at Atlantic and Wheeler Substations)	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1507	Rebuild Mt Storm – Doubs 500 kV		<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)
b1508.1	Build a 2nd 230 kV Line Harrisonburg to Endless Caverns		APS (37.05%) / Dominion (62.95%)
b1508.2	Install a 3rd 230-115 kV Tx at Endless Caverns		APS (37.05%) / Dominion (62.95%)
b1508.3	Upgrade a 115 kV shunt capacitor banks at Merck and Edinburg		APS (37.05%) / Dominion (62.95%)
b1536	Advance n1752 (Replace OX 230 breaker 24342 with an (63kA breaker)		Dominion (100%)
b1537	Advance n1753 (Replace OX 230 breaker 243T2097 with an 63kA breaker)		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1538	Replace Loudoun 230 kV breaker '29552'	Dominion (100%)
b1571	Replace Acca 115 kV breaker '6072' with 40 kA	Dominion (100%)
b1647	Upgrade the name plate rating at Morrisville 500kV breaker 'H1T573' with 50kA breaker	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> Dominion (100%)
b1648	Upgrade name plate rating at Morrisville 500kV breaker 'H2T545' with 50kA breaker	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1649	Replace Morrisville 500kV breaker 'H1T580' with 50kA breaker	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1650	Replace Morrisville 500kV breaker 'H2T569' with 50kA breaker	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1651	Replace Loudoun 230kV breaker '295T2030' with 63kA breaker	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1652	Replace Ox 230kV breaker '209742' with 63kA breaker	Dominion (100%)
b1653	Replace Clifton 230kV breaker '26582' with 63kA breaker	Dominion (100%)
b1654	Replace Clifton 230kV breaker '26682' with 63kA breaker	Dominion (100%)
b1655	Replace Clifton 230kV breaker '205182' with 63kA breaker	Dominion (100%)
b1656	Replace Clifton 230kV breaker '265T266' with 63kA breaker	Dominion (100%)
b1657	Replace Clifton 230kV breaker '2051T2063' with 63kA breaker	Dominion (100%)
b1694	Rebuild Loudoun - Brambleton 500 kV Rebuild Loudoun - Brambleton 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (14.19%) / BGE (12.70%) / Dominion (58.79%) / PEPCO (14.32%)
b1696	Install a breaker and a half scheme with a minimum of eight 230 kV breakers for five existing lines at Idylwood 230 kV	AEC (0.46%) / APS (4.18%) / BGE (2.02%) / DPL (0.80%) / Dominion (88.45%) / JCPL (0.64%) / ME (0.50%) / NEPTUNE* (0.06%) / PECO (1.55%) / PEPCO (1.34%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1697	Build a 2nd Clark - Idylwood 230 kV line and install 230 kV gas-hybrid breakers at Clark	AEC (1.35%) / APS (15.65%) / BGE (10.53%) / DPL (2.59%) / Dominion (46.97%) / JCPL (2.36%) / ME (1.91%) / NEPTUNE* (0.23%) / PECO (4.48%) / PEPCO (11.23%) / PSEG (2.59%) / RE (0.11%)
b1698	Install a 2nd 500/230 kV transformer at Brambleton	APS (4.21%) / BGE (13.28%) / DPL (1.09%) / Dominion (59.38%) / PEPCO (22.04%)
b1698.1	Install a 500 kV breaker at Brambleton	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1698.6	Replace Brambleton 230 kV breaker '2094T2095'	Dominion (100%)
b1699	Reconfigure Line #203 to feed Edwards Ferry sub radial from Pleasant View 230 kV and install new breaker bay at Pleasant View Sub	Dominion (100%)
b1700	Install a 230/115 kV transformer at the new Liberty substation to relieve Gainesville Transformer #3	Dominion (100%)
b1701	Reconductor line #2104 (Fredericksburg - Cranes Corner 230 kV)	APS (8.66%) / BGE (10.95%) / Dominion (63.30%) / PEPCO (17.09%)
b1724	Install a 2nd 138/115 kV transformer at Edinburg	Dominion (100%)
b1728	Replace the 115/34.5 kV transformer #1 at Hickory with a 230/34.5 kV transformer	Dominion (100%)
b1729	Add 4 breaker ring bus at Burton 115 kV substation and construct a 115 kV line approximately 3.5 miles from Oakwood 115 kV substation to Burton 115 kV substation	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1730	Install a 230/115 kV transformer at a new Liberty substation	Dominion (100%)
b1731	Uprate or rebuild Four Rivers – Kings Dominion 115 kV line or Install capacitors or convert load from 115 kV system to 230 kV system	Dominion (100%)
b1790	Split Wharton 115 kV capacitor bank into two smaller units and add additional reactive support in area by correcting power factor at Pantego 115 kV DP and FivePoints 115 kV DP to minimum of 0.973	Dominion (100%)
b1791	Wreck and rebuild 2.1 mile section of Line #11 section between Gordonsville and Somerset	APS (5.83%) / BGE (6.25%) / Dominion (78.38%) / PEPCO (9.54%)
b1792	Rebuild line #33 Halifax to Chase City, 26 miles. Install 230 kV 4 breaker ring bus	Dominion (100%)
b1793	Wreck and rebuild remaining section of Line #22, 19.5 miles and replace two pole H frame construction built in 1930	Dominion (100%)
b1794	Split 230 kV Line #2056 (Hornertown - Rocky Mount) and double tap line to Battleboro Substation. Expand station, install a 230 kV 3 breaker ring bus and install a 230/115 kV transformer	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1795	Reconductor segment of Line #54 (Carolina to Woodland 115 kV) to a minimum of 300 MVA	Dominion (100%)
b1796	Install 115 kV 25 MVAR capacitor bank at Kitty Hawk Substation	Dominion (100%)
b1797	Wreck and rebuild 7 miles of the Dominion owned section of Cloverdale - Lexington 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (0.86%) / APS (41.66%) / ATSI (0.40%) / BGE (20.89%) / Dayton (0.14%) / DEOK (0.44%) / Dominion (0.95%) / EKPC (0.13%) / PEPCO (34.53%)
b1798	Build a 450 MVAR SVC and 300 MVAR switched shunt at Loudoun 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (88.62%) / PEPCO (11.38%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1799	Build 150 MVAR Switched Shunt at Pleasant View 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (3.37%) / Dominion (95.01%)  / ME (0.54%) / PEPCO (1.08%)</p>
b1805	Install a 250 MVAR SVC at the existing Mt. Storm 500kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) /  APS (5.50%) / ATSI (8.04%) /  BGE (4.16%) / ComEd (13.35%) /  ConEd (0.57%) / Dayton (2.11%) /  DEOK (3.35%) / DL (1.76%) /  DPL (2.60%) / Dominion (12.32%)  / EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.76%) / ME (1.86%) /  NEPTUNE* (0.42%) / PECO  (5.27%) / PENELEC (1.84%) /  PEPCO (4.15%) / PPL (4.43%) /  PSEG (6.18%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>
b1809	Replace Brambleton 230 kV Breaker '22702'	Dominion (100%)
b1810	Replace Brambleton 230 kV Breaker '227T2094'	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.1	Surry to Skiffes Creek 500 kV Line (7 miles overhead)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1905.2	Surry 500 kV Station Work	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1905.3	Skiffes Creek 500-230 kV Tx and Switching Station	Dominion (99.84%) / PEPCO (0.16%)
b1905.4	New Skiffes Creek - Whealton 230 kV line	Dominion (99.84%) / PEPCO (0.16%)
b1905.5	Whealton 230 kV breakers	Dominion (99.84%) / PEPCO (0.16%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.6	Yorktown 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.7	Lanexa 115 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.8	Surry 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.9	Kings Mill, Peninmen, Toano, Waller, Warwick	Dominion (99.84%) / PEPCO (0.16%)
b1906.1	At Yadkin 500 kV, install six 500 kV breakers	<b>Load-Ratio Share Allocation:</b> AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)
b1906.2	Install a 2nd 230/115 kV TX at Yadkin	Dominion (100%)
b1906.3	Install a 2nd 230/115 kV TX at Chesapeake	Dominion (100%)
b1906.4	Uprate Yadkin – Chesapeake 115 kV	Dominion (100%)
b1906.5	Install a third 500/230 kV TX at Yadkin	Dominion (100%)
b1907	Install a 3rd 500/230 kV TX at Clover	APS (5.83%) / BGE (4.74%) / Dominion (81.79%) / PEPCO (7.64%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1908	Rebuild Lexington – Dooms 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  DEOK (1.12%) / Dominion (85.91%) / EKPC (0.33%) / PEPCO (12.64%)</p>
b1909	Uprate Bremono – Midlothian 230 kV to its maximum operating temperature	APS (6.31%) / BGE (3.81%) / Dominion (81.90%) / PEPCO (7.98%)
b1910	Build a Suffolk – Yadkin 230 kV line (14 miles) and install 4 breakers	Dominion (100%)
b1911	Add a second Valley 500/230 kV TX	APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)
b1912	Install a 500 MVAR SVC at Landstown 230 kV	DEOK (0.46%) / Dominion (99.54%)
b2053	Rebuild 28 mile line	AEP (100%)
b2125	Install four additional 230 kV 100 MVAR variable shunt reactor banks at Clifton, Gallows Road, Garrisonville, and Virginia Hills substations	Dominion (100%)
b2126	Install two additional 230 kV 100 MVAR variable shunt reactor banks at Churchland and Shawboro substations	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2181	Add a motor to an existing switch at Prince George to allow for Sectionalizing scheme for line #2124 and allow for Brickhouse DP to be re-energized from the 115 kV source	Dominion (100%)
b2182	Install 230kV 4-breaker ring at Enterprise 230 kV to isolate load from transmission system when substation initially built	Dominion (100%)
b2183	Add a motor to an existing switch at Keene Mill to allow for a sectionalizing scheme	Dominion (100%)
b2184	Install a 230 kV breaker at Tarboro to split line #229. Each will feed an autotransformer at Tarboro. Install switches on each autotransformer	Dominion (100%)
b2185	Uprate Line #69 segment Reams DP to Purdy (19 miles) from 41 MVA to 162 MVA by replacing 5 structures and re-sagging the line from 50C to 75C	Dominion (100%)
b2186	Install a 2nd 230-115kV transformer at Earleys connected to the existing 115kV and 230kV ring busses. Add a 115 kV breaker and 230kV breaker to the ring busses	Dominion (100%)
b2187	Install 4 - 230kV breakers at Shellhorn 230 kV to isolate load	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

Schedule 12 – Appendix  
Versions effective February 1, 2017 - MAIT Integration  
(Clean Format)

## SCHEDULE 12 – APPENDIX

### (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0215	Install 230Kv series reactor and 2- 100MVAR PLC switched capacitors at Hunterstown	AEC (6.68%) / APS (3.95%) / ConEd (0.42%) / DPL (9.06%) / JCPL (16.78%) / ME (10.49%) / Neptune* (1.68%) / PECO (18.92%) / PPL (7.52%) / PSEG (22.57%) / RE (0.34%) / UGI (0.95%) / ECP** (0.64%)
b0404.1	Replace South Reading 230 kV breaker 107252	ME (100%)
b0404.2	Replace South Reading 230 kV breaker 100652	ME (100%)
b0575.1	Rebuild Hunterstown – Texas Eastern Tap 115 kV	ME (100%)
b0575.2	Rebuild Texas Eastern Tap – Gardners 115 kV and associated upgrades at Gardners including disconnect switches	ME (100%)
b0650	Reconductor Jackson – JE Baker – Taxville 115 kV line	ME (100%)
b0652	Install bus tie circuit breaker on Yorkana 115 kV bus and expand the Yorkana 230 kV ring bus by one breaker so that the Yorkana 230/115 kV banks 1, 3, and 4 cannot be lost for either B-14 breaker fault or a 230 kV line or bank fault with a stuck breaker	ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0653 Construct a 230 kV Bernville station by tapping the North Temple – North Lebanon 230 kV line. Install a 230/69 kV transformer at existing Bernville 69 kV station		ME (100%)
b1000 Replace Portland 115kV breaker '95312'		ME (100%)
b1001 Replace Portland 115kV breaker '92712'		ME (100%)
b1002 Replace Hunterstown 115 kV breaker '96392'		ME (100%)
b1003 Replace Hunterstown 115 kV breaker '96292'		ME (100%)
b1004 Replace Hunterstown 115 kV breaker '99192'		ME (100%)
b1061 Replace existing Yorkana 230/115 kV transformer banks 1 and 4 with a single, larger transformer similar to transformer bank #3		ME (100%)
b1061.1 Replace the Yorkana 115 kV breaker '97282'		ME (100%)
b1061.2 Replace the Yorkana 115 kV breaker 'B282'		ME (100%)
b1302 Replace the limiting bus conductor and wave trap at the Jackson 115 kV terminal of the Jackson – JE Baker Tap 115 kV line		ME (100%)
b1365 Reconductor the Middletown – Collins 115 kV (975) line 0.32 miles of 336 ACSR		ME (100%)

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\*\* East Coast Power, L.L.C.

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b1366	Reconductor the Collins – Cly – Newberry 115 kV (975) line 5 miles with 795 ACSR		ME (100%)
b1727	Reconductor 2.4 miles of existing 556 and 795 ACSR from Harley Davidson to Pleasureville 115 kV with 795 ACSS to raise the ratings		ME (100%)
b1800	Install a 500 MVAR SVC at the existing Hunterstown 500kV substation		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ATSI (0.42%) / BGE (55.33%) / DL (0.15%) / DPL (19.19%) / ME (24.91%)</p>
b1801	Build a 250 MVAR SVC at Altoona 230 kV		AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / Neptune* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1816.5	Replace SCCIR (Sub-conductor) at Hunterstown Substation on the No. 1, 230/115 kV transformer	ME (100%)
b1999	Replace limiting wave trap, circuit breaker, substation conductor, relay and current transformer components at Northwood	ME (100%)
b2000	Replace limiting wave trap on the Glendon - Hosensack line	ME (100%)
b2001	Replace limiting circuit breaker and substation conductor transformer components at Portland 230kV	ME (100%)
b2002	Northwood 230/115 kV Transformer upgrade	ME (100%)
b2023	Construct a new North Temple - Riverview - Cartech 69 kV line (4.7 miles) with 795 ACSR	ME (100%)
b2024	Upgrade 4/0 substation conductors at Middletown 69 kV	ME (100%)
b2025	Upgrade 4/0 and 350 Cu substation conductors at the Middletown Junction terminal of the Middletown Junction - Wood Street Tap 69 kV line	ME (100%)
b2026	Upgrade an OC protection relay at the Baldy 69 kV substation	ME (100%)
b2148	Install a 115 kV 28.8 MVAR capacitor at Pleasureville substation	ME (100%)

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2149 Upgrade substation riser on the Smith St. - York Inc. 115 kV line		ME (100%)
b2150 Upgrade York Haven structure 115 kV bus conductor on Middletown Jct. - Zions View 115 kV		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.



## SCHEDULE 12 – APPENDIX

### (7) Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.1	Build 500 kV substation in PENELEC – Tap the Keystone – Juniata and Conemaugh – Juniata 500 kV, connect the circuits with a breaker and half scheme, and install new 400 MVAR capacitor	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0284.3	Replace wave trap and upgrade a bus section at Keystone 500 kV – on the Keystone – Airydale 500 kV	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0285.1	Replace wave trap at Keystone 500 kV – on the Keystone – Conemaugh 500 kV	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0285.2	Replace wave trap and relay at Conemaugh 500 kV – on the Conemaugh – Keystone 500 kV	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0349	Upgrade Rolling Meadows-Gore Jct 115 kV	PENELEC (100%)
b0360	Construction of a ring bus on the 345 kV side of Wayne substation	PENELEC (100%)
b0365	Add a 50 MVAR, 230 kV cap bank at Altoona 230 kV	PENELEC (100%)
b0369	Install 100 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)
b0370	Install 500 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0376	Install 300 MVAR capacitor at Conemaugh 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.11%) / BGE (14.99%) / DL (0.25%) / ECP (0.76%) / HTP (0.70%) / JCPL (19.52%) / ME (11.95%) / NEPTUNE (2.12%) / PECO (19.24%) / PSEG (24.38%) / RE (0.98%)</p>
b0442	Spare Keystone 500/230 kV transformer	PENELEC (100%)
b0515	Replace Lewistown circuit breaker 1LY Yeagertown	PENELEC (100%)
b0516	Replace Lewistown circuit breaker 2LY Yeagertown	PENELEC (100%)
b0517	Replace Shawville bus section circuit breaker	PENELEC (100%)
b0518	Replace Homer City circuit breaker 201 Johnstown	PENELEC (100%)

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\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0519	Replace Keystone circuit breaker 4 Transformer - 20	PENELEC (100%)
b0549	Install 250 MVAR capacitor at Keystone 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.69%) / AEP (14.17%) / APS (5.50%) / ATSI (8.04%) / BGE (4.16%) / ComEd (13.35%) / ConEd (0.57%) / Dayton (2.11%) / DEOK (3.35%) / DL (1.76%) / DPL (2.60%) / Dominion (12.32%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.76%) / ME (1.86%) / NEPTUNE* (0.42%) / PECO (5.27%) / PENELEC (1.84%) / PEPCO (4.15%) / PPL (4.43%) / PSEG (6.18%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.17%) / ATSI (0.35%) / BGE (20.18%) / DL (0.15%) / ECP (0.60%) / HTP (0.54%) / JCPL (17.10%) / ME (13.58%) / NEPTUNE (1.86%) / PECO (19.27%) / PSEG (20.38%) / RE (0.82%)</p>
b0550	Install 25 MVAR capacitor at Lewis Run 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0551	Install 25 MVAR capacitor at Saxton 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0552	Install 50 MVAR capacitor at Altoona 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0553	Install 50 MVAR capacitor at Raystown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0555	Install 100 MVAR capacitor at Johnstown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0556	Install 50 MVAR capacitor at Grover 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0557	Install 75 MVAR capacitor at East Towanda 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0563	Install 25 MVAR capacitor at Farmers Valley 115 kV substation	PENELEC (100%)
b0564	Install 10 MVAR capacitor at Ridgeway 115 kV substation	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0654	Reconfigure the Cambria Slope 115 kV and Wilmore Junction 115 kV stations to eliminate Wilmore Junction 115 kV 3-terminal line	PENELEC (100%)
b0655	Reconfigure and expand the Glade 230 kV ring bus to eliminate the Glade Tap 230 kV 3-terminal line	PENELEC (100%)
b0656	Add three breakers to form a ring bus at Altoona 230 kV	PENELEC (100%)
b0794	Upgrade the Homer City 230 kV breaker 'Pierce Road'	PENELEC (100%)
b1005	Replace Glory 115 kV breaker '#7 XFMR'	PENELEC (100%)
b1006	Replace Shawville 115 kV breaker 'NO.14 XFMR'	PENELEC (100%)
b1007	Replace Shawville 115 kV breaker 'NO.15 XFMR'	PENELEC (100%)
b1008	Replace Shawville 115 kV breaker '#1B XFMR'	PENELEC (100%)
b1009	Replace Shawville 115 kV breaker '#2B XFMR'	PENELEC (100%)
b1010	Replace Shawville 115 kV breaker 'Dubois'	PENELEC (100%)

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1011	Replace Shawville 115 kV breaker 'Philipsburg'	PENELEC (100%)
b1012	Replace Shawville 115 kV breaker 'Garman'	PENELEC (100%)
b1059	Replace a CRS relay at Hooversville 115 kV station	PENELEC (100%)
b1060	Replace a CRS relay at Rachel Hill 115 kV station	PENELEC (100%)
b1153	Upgrade Conemaugh 500/230 kV transformer and add a new line from Conemaugh-Seward 230 kV	AEC (3.72%) / APS (6.23%) / BGE (16.75%) / ConEd (0.39%) / DL (0.32%) / JCPL (12.52%) / ME (6.87%) / PECO (11.49%) / PEPCO (0.55%) / PPL (15.36%) / PSEG (20.44%) / RE (0.71%) / NEPTUNE* (1.70%) / ECP** (2.95%)
b1153.1	Revise the reclosing on the Shelocta 115 kV breaker 'Lucerne'	PENELEC (100%)
b1169	Replace Shawville 115 kV breaker '#1A XFMR'	PENELEC (100%)
b1170	Replace Shawville 115 kV breaker '#2A XFMR'	PENELEC (100%)
b1277	Build a new Osterburg East – Bedford North 115 kV Line, 5.7 miles of 795 ACSR	PENELEC (100%)
b1278	Install 25 MVAR Capacitor Bank at Somerset 115 kV	PENELEC (100%)



**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1367	Replace the Cambria Slope 115/46 kV 50 MVA transformer with 75 MVA	PENELEC (100%)
b1368	Replace the Claysburg 115/46 kV 30 MVA transformer with 75 MVA	PENELEC (100%)
b1369	Replace the 4/0 CU substation conductor with 795 ACSR on the Westfall S21 Tap 46 kV line	PENELEC (100%)
b1370	Install a 3rd 115/46 kV transformer at Westfall	PENELEC (100%)
b1371	Reconductor 2.6 miles of the Claysburg – HCR 46 kV line with 636 ACSR	PENELEC (100%)
b1372	Replace 4/0 CU substation conductor with 795 ACSR on the Hollidaysburg – HCR 46 kV	PENELEC (100%)
b1373	Re-configure the Erie West 345 kV substation, add a new circuit breaker and relocate the Ashtabula line exit	PENELEC (100%)
b1374	Replace wave traps at Raritan River and Deep Run 115 kV substations with higher rated equipment for both B2 and C3 circuits	PENELEC (100%)
b1535	Reconductor 0.8 miles of the Gore Junction – ESG Tap 115 kV line with 795 ACSR	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1607	Reconductor the New Baltimore - Bedford North 115 kV	PENELEC (100%)
b1608	Construct a new 345/115 kV substation and loop the Mansfield - Everts 115 kV	APS (8.57%) / ConEd (0.47%) / PECO (1.71%) / PENELEC (89.25%)
b1609	Construct Four Mile Junction 230/115 kV substation. Loop the Erie South - Erie East 230 kV line, Buffalo Road - Corry East and Buffalo Road - Erie South 115 kV lines	APS (4.86%) / PENELEC (95.14%)
b1610	Install a new 230 kV breaker at Yeagertown	PENELEC (100%)
b1713	Install a 345 kV breaker at Erie West and relocate Ashtabula 345 kV line	PENELEC (100%)
b1769	Install a 75 MVAR cap bank on the Four Mile 230 kV bus	PENELEC (100%)
b1770	Install a 50 MVAR cap bank on the Buffalo Road 115 kV bus	PENELEC (100%)
b1802	Build a 100 MVAR Fast Switched Shunt and 200 MVAR Switched Shunt at Mansfield 345 kV	AEC (6.45%) / AEP (2.57%) / APS (6.86%) / BGE (6.55%) / ConEd (0.29%) / DPL (12.35%) / Dominion (14.85%) / JCPL (8.12%) / ME (6.19%) / NEPTUNE* (0.82%) / PECO (21.50%) / PPL (4.87%) / PSEG (8.16%) / RE (0.33%) / ECP** (0.09%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1821	Replace the Erie South 115 kV breaker 'Union City'	PENELEC (100%)
b1943	Construct a 115 kV ring bus at Claysburg Substation. Bedford North and Saxton lines will no longer share a common breaker	PENELEC (100%)
b1944	Reconductor Eclipse substation 115 kV bus with 1033 kcmil conductor	PENELEC (100%)
b1945	Install second 230/115 kV autotransformer at Johnstown	PENELEC (100%)
b1966	Replace the 1200 Amp Line trap at Lewistown on the Raystown-Lewistown 230 kV line and replace substation conductor at Lewistown	PENELEC (100%)
b1967	Replace the Blairsville 138/115 kV transformer	PENELEC (100%)
b1990	Install a 25 MVAR 115 kV Capacitor at Grandview	PENELEC (100%)
b1991	Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the Homer City-Stolle Road 345 kV line into Farmers Valley	PENELEC (100%)
b1992	Reconductor Cambria Slope-Summit 115kV with 795 ACSS Conductor	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1993	Relocate the Erie South 345 kV line terminal	APS (10.09%) / ECP** (0.45%) / HTP (0.49%) / JCPL (5.14%) / Neptune* (0.54%) / PENELEC (70.71%) / PSEG (12.10%) / RE (0.48%)
b1994	Convert Lewis Run-Farmers Valley to 230 kV using 1033.5 ACSR conductor. Project to be completed in conjunction with new Farmers Valley 345/230 kV transformation	APS (33.20%) / ECP** (0.44%) / HTP (0.44%) / JCPL (8.64%) / ME (5.52%) / Neptune (0.86%) / PENELEC (36.81%) / PSEG (13.55%) / RE (0.54%)
b1995	Change CT Ratio at Claysburg	PENELEC (100%)
b1996.1	Replace 600 Amp Disconnect Switches on Ridgeway-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1996.2	Reconductor Ridgeway and Whetstone 115 kV Bus	PENELEC (100%)
b1996.3	Replace Wave Trap at Ridgeway	PENELEC (100%)
b1996.4	Change CT Ratio at Ridgeway	PENELEC (100%)
b1997	Replace 600 Amp Disconnect Switches on Dubois-Harvey Run-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville		PENELEC (100%)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

Schedule 12 – Appendix  
Versions effective May 1, 2017 - ConEd Wheeling  
Termination

(Clean Format)

## SCHEDULE 12 – APPENDIX

### (1) Atlantic City Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0135	Build new Cumberland – Dennis 230 kV circuit which replaces existing Cumberland – Corson 138 kV	AEC (100%)
b0136	Install Dennis 230/138 kV transformer, Dennis 150 MVAR SVC and 50 MVAR capacitor	AEC (100%)
b0137	Build new Dennis – Corson 138 kV circuit	AEC (100%)
b0138	Install Cardiff 230/138 kV transformer and a 50 MVAR capacitor at Cardiff	AEC (100%)
b0139	Build new Cardiff – Lewis 138 kV circuit	AEC (100%)
b0140	Reconductor Laurel – Woodstown 69 kV	AEC (100%)
b0141	Reconductor Monroe – North Central 69 kV	AEC (100%)
b0265	Upgrade AE portion of Delco Tap – Mickleton 230 kV circuit	AEC (89.87%) / JCPL (9.48%) / Neptune* (0.65%)
b0276	Replace both Monroe 230/69 kV transformers	AEC (91.28%) / PSEG (8.29%) / RE (0.23%) / ECP** (0.20%)
b0276.1	Upgrade a strand bus at Monroe to increase the rating of transformer #2	AEC (100%)
b0277	Install a second Cumberland 230/138 kV transformer	AEC (100%)
b0281.1	Install 35 MVAR capacitor at Lake Ave 69 kV substation	AEC (100%)

## Atlantic City Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0281.2	Install 15 MVAR capacitor at Shipbottom 69 kV substation		AEC (100%)
b0281.3	Install 8 MVAR capacitors on the AE distribution system		AEC (100%)
b0142	Reconductor Landis – Minotola 138 kV		AEC (100%)
b0143	Reconductor Beckett – Paulsboro 69 kV		AEC (100%)
b0210	Install a new 500/230kV substation in AEC area. The high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEC (100%)
b0210.1	Orchard – Cumberland – Install second 230 kV line		AEC (65.23%) / JCPL (25.87%) / Neptune * (2.55%) / PSEG (6.35%)††
b0210.2	Install a new 500/230kV substation in AEC area, the high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)††

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.



### Atlantic City Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0211	Reconductor Union - Corson 138kV circuit		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0212	Substation upgrades at Union and Corson 138kV		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0214	Install 50 MVAR capacitor at Cardiff 230kV substation		AEC (100%)
b0431	Monroe Upgrade New Freedom strand bus		AEC (100%)
b0576	Move the Monroe 230/69 kV to Mickleton		AEC (100%)
b0744	Upgrade a strand bus at Mill 138 kV		AEC (100%)
b0871	Install 35 MVAR capacitor at Motts Farm 69 kV		AEC (100%)
b1072	Modify the existing EMS load shedding scheme at Cedar to additionally sense the loss of both Cedar 230/69 kV transformers and shed load accordingly		AEC (100%)
b1127	Build a new Lincoln-Minitola 138 kV line		AEC (100%)
b1195.1	Upgrade the Corson sub T2 terminal		AEC (100%)
b1195.2	Upgrade the Corson sub T1 terminal		AEC (100%)

### Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1244	Install 10 MVAR capacitor at Peermont 69 kV substation	AEC (100%)
b1245	Rebuild the Newport-South Millville 69 kV line	AEC (100%)
b1250	Reconductor the Monroe – Glassboro 69 kV	AEC (100%)
b1250.1	Upgrade substation equipment at Glassboro	AEC (100%)
b1280	Sherman: Upgrade 138/69 kV transformers	AEC (100%)
b1396	Replace Lewis 138 kV breaker ‘L’	AEC (100%)
b1398.5	Reconductor the existing Mickleton – Goucestr 230 kV circuit (AE portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1598	Reconductor Sherman Av – Carl’s Corner 69kV circuit	AEC (100%)
b1599	Replace terminal equipments at Central North 69 kV substation	AEC (100%)
b1600	Upgrade the Mill T2 138/69 kV transformer	AEC (88.83%) / JCPL (4.74%) / HTP (0.20%) / ECP** (0.22%) / PSEG (5.78%) / RE (0.23%)
b2157	Re-build 5.3 miles of the Corson - Tuckahoe 69 kV circuit	AEC (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

## SCHEDULE 12 – APPENDIX

### (3) Delmarva Power & Light Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0144.1	Build new Red Lion – Milford – Indian River 230 kV circuit	DPL (100%)
b0144.2	Indian River Sub – 230 kV Terminal Position	DPL (100%)
b0144.3	Red Lion Sub – 230 kV Terminal Position	DPL (100%)
b0144.4	Milford Sub – (2) 230 kV Terminal Positions	DPL (100%)
b0144.5	Indian River – 138 kV Transmission Line to AT-20	DPL (100%)
b0144.6	Indian River – 138 & 69 kV Transmission Ckts. Undergrounding	DPL (100%)
b0144.7	Indian River – (2) 230 kV bus ties	DPL (100%)
b0148	Re-rate Glasgow – Mt. Pleasant 138 kV and North Seaford – South Harrington 138 kV	DPL (100%)
b0149	Complete structure work to increase rating of Cheswold – Jones REA 138 kV	DPL (100%)
b0221	Replace disconnect switch on Edgewood-N. Salisbury 69 kV	DPL (100%)
b0241.1	Keeny Sub – Replace overstressed breakers	DPL (100%)
b0241.2	Edgemoor Sub – Replace overstressed breakers	DPL (100%)
b0241.3	Red Lion Sub – Substation reconfigure to provide for second Red Lion 500/230 kV transformer	DPL (84.5%) / PECO (15.5%)
b0261	Replace 1200 Amp disconnect switch on the Red Lion – Reybold 138 kV circuit	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0262	Reconductor 0.5 miles of Christiana – Edgemoor 138 kV		DPL (100%)
b0263	Replace 1200 Amp wavetrapp at Indian River on the Indian River – Frankford 138 kV line		DPL (100%)
b0272.1	Replace line trap and disconnect switch at Keeney 500 kV substation – 5025 Line Terminal Upgrade		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEC (21.12%) / BGE (1.94%) / DPL (38.69%) / ECP (0.11%) / HTP (0.15%) / JCPL (7.65%) / NEPTUNE (0.99%) / PECO (26.10%) / PEPCO (1.83%) / PPL (1.42%)
b0282	Install 46 MVAR capacitors on the DPL distribution system		DPL (100%)
b0291	Replace 1600A disconnect switch at Harmony 230 kV and for the Harmony – Edgemoor 230 kV circuit, increase the operating temperature of the conductor		DPL (100%)
b0295	Raise conductor temperature of North Seaford – Pine Street – Dupont Seaford		DPL (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, LLC

\*\*\*Hudson Transmission Partners, LLC

**Delmarva Power & Light Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0296	Rehoboth/Cedar Neck Tap (6733-2) upgrade		DPL (100%)
b0320	Create a new 230 kV station that splits the 2 <sup>nd</sup> Milford to Indian River 230 kV line, add a 230/69 kV transformer, and run a new 69 kV line down to Harbeson 69 kV		DPL (100%)
b0382	Cambridge Sub – Close through to Todd Substation		DPL (100%)
b0383	Wye Mills AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0384	Replace Indian River AT-20 (400 MVA)		DPL (100%)
b0385	Oak Hall to New Church (13765) Upgrade		DPL (100%)
b0386	Cheswold/Kent (6768) Rebuild		DPL (100%)
b0387	N. Seaford – Add a 2 <sup>nd</sup> 138/69 kV autotransformer		DPL (100%)
b0388	Hallwood/Parksley (6790-2) Upgrade		DPL (100%)
b0389	Indian River AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0390	Rehoboth/Lewes (6751-1 and 6751-2) Upgrade		DPL (100%)
b0391	Kent/New Meredith (6704-2) Upgrade		DPL (100%)
b0392	East New Market Sub – Establish a 69 kV Bus Arrangement		DPL (100%)
b0415	Increase the temperature ratings of the Edgemoor – Christiana – New Castle 138 kV by replacing six transmission poles		DPL (100%)

### Delmarva Power & Light Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0437	Spare Keeney 500/230 kV transformer		DPL (100%)
b0441	Additional spare Keeney 500/230 kV transformer		DPL (100%)
b0480	Rebuild Lank – Five Points 69 kV		DPL (100%)
b0481	Replace wave trap at Indian River 138 kV on the Omar – Indian River 138 kV circuit		DPL (100%)
b0482	Rebuild Millsboro – Zoar REA 69 kV		DPL (100%)
b0483	Replace Church 138/69 kV transformer and add two breakers		DPL (100%)
b0483.1	Build Oak Hall – Wattsville 138 kV line		DPL (100%)
b0483.2	Add 138/69 kV transformer at Wattsville		DPL (100%)
b0483.3	Establish 138 kV bus position at Oak Hall		DPL (100%)
b0484	Re-tension Worcester – Berlin 69 kV for 125°C		DPL (100%)
b0485	Re-tension Taylor – North Seaford 69 kV for 125°C		DPL (100%)
b0494.1	Install a 2 <sup>nd</sup> Red Lion 230/138 kV		DPL (100%)
b0494.2	Hares Corner – Relay Improvement		DPL (100%)
b0494.3	Reybold – Relay Improvement		DPL (100%)
b0494.4	New Castle – Relay Improvement		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0513	Rebuild the Ocean Bay – Maridel 69 kV line	DPL (100%)
b0527	Replace existing 12 MVAR capacitor at Bethany with a 30 MVAR capacitor	DPL (100%)
b0528	Replace existing 69/12 kV transformer at Bethany with a 138/12 kV transformer	DPL (100%)
b0529	Install an additional 8.4 MVAR capacitor at Grasonville 69 Kv	DPL (100%)
b0530	Replace existing 12 MVAR capacitor at Wye Mills with a 30 MVAR capacitor	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0531	Create a four breaker 138 kV ring bus at Wye Mills and add a second 138/69 kV transformer	DPL (100%)
b0566	Rebuild the Trappe Tap – Todd 69 kV line	DPL (100%)
b0567	Rebuild the Mt. Pleasant – Townsend 138 kV line	DPL (100%)
b0568	Install a third Indian River 230/138 kV transformer	DPL (100%)
b0725	Add a third Steele 230/138 kV transformer	DPL (100%)
b0732	Rebuild Vaugh – Wells 69 kV	DPL (100%)
b0733	Add a second 230/138 kV transformer at Harmony	DPL (97.06%) / PECO (2.94%)
b0734	Rebuild Church – Steele 138 kV	DPL (100%)
b0735	Rebuild Indian River – Omar – Bethany 138 kV	DPL (100%)
b0736	Rebuild Dupont Edgemoor – Edgemoor – Silverside 69 kV	DPL (69.46%) / PECO (17.25%) / ECP** (0.27%) / PSEG (12.53%) / RE (0.49%)
b0737	Build a new Indian River – Bishop 138 kV line	DPL (100%)
b0750	Convert 138 kV network path from Vienna – Loretto – Piney - Grove to 230 kV, add 230/138 kV transformer to Loretto 230 kV	DPL (100%)



## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0751	Add two additional breakers at Keeney 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> DPL (100%)
b0752	Replace two circuit breakers to bring the emergency rating up to 348 MVA	DPL (100%)
b0753	Add a second Loretto 230/138 kV transformer	DPL (100%)
b0754	Rebuild 10 miles of Glasgow to Mt. Pleasant 138 kV line to bring the normal rating to 298 MVA and the emergency rating to 333 MVA	DPL (100%)
b0792	Reconfigure Cecil Sub into 230 and 138 kV ring buses, add a 230/138 kV transformer, and operate the 34.5 kV bus normally open	DPL (100%)
b0873	Build 2nd Glasgow-Mt Pleasant 138 kV line	DPL (100%)
b0874	Reconfigure Brandywine substation	DPL (100%)

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, LLC

\*\*\*Hudson Transmission Partners, LLC

## Delmarva Power & Light Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0876	Install 50 MVAR SVC at 138th St 138 kV		DPL (100%)
b0877	Build a 2nd Vienna-Steele 230 kV line		DPL (100%)
b0879.1	Apply a special protection scheme (load drop at Stevensville and Grasonville)		DPL (100%)
b1246	Re-build the Townsend – Church 138 kV circuit		DPL (100%)
b1247	Re-build the Glasgow – Cecil 138 kV circuit		DPL (72.06%) / PECO (27.94%)
b1248	Install two 15 MVAR capacitor at Loretto 69 kV		DPL (100%)
b1249	Reconfigure the existing Sussex 69 kV capacitor		DPL (100%)
b1603	Upgrade 19 miles conductor of the Wattsville - Signepost - Stockton - Kenney 69 kV circuit		DPL (100%)
b1604	Replace CT at Reybold 138 kV substation		DPL (100%)
b1723	Replace strand bus and disconnect switch at Glasgow 138 kV substation		DPL (100%)
b1899.1	Install new variable reactors at Indian River and Nelson 138 kV		DPL (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-3.

**Delmarva Power & Light Company (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1899.2	Install new variable reactors at Cedar Creek 230 kV		DPL (100%)
b1899.3	Install new variable reactors at New Castle 138 kV and Easton 69 kV		DPL (100%)

## SCHEDULE 12 – APPENDIX

### (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0215	Install 230Kv series reactor and 2- 100MVAR PLC switched capacitors at Hunterstown	AEC (6.71%) / APS (3.97%) / DPL (9.10%) / JCPL (16.85%) / ME (10.53%) / Neptune* (1.69%) / PECO (19.00%) / PPL (7.55%) / PSEG (22.67%) / RE (0.34%) / UGI (0.95%) / ECP** (0.64%)
b0404.1	Replace South Reading 230 kV breaker 107252	ME (100%)
b0404.2	Replace South Reading 230 kV breaker 100652	ME (100%)
b0575.1	Rebuild Hunterstown – Texas Eastern Tap 115 kV	ME (100%)
b0575.2	Rebuild Texas Eastern Tap – Gardners 115 kV and associated upgrades at Gardners including disconnect switches	ME (100%)
b0650	Reconductor Jackson – JE Baker – Taxville 115 kV line	ME (100%)
b0652	Install bus tie circuit breaker on Yorkana 115 kV bus and expand the Yorkana 230 kV ring bus by one breaker so that the Yorkana 230/115 kV banks 1, 3, and 4 cannot be lost for either B-14 breaker fault or a 230 kV line or bank fault with a stuck breaker	ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b0653	Construct a 230 kV Bernville station by tapping the North Temple – North Lebanon 230 kV line. Install a 230/69 kV transformer at existing Bernville 69 kV station		ME (100%)
b1000	Replace Portland 115kV breaker '95312'		ME (100%)
b1001	Replace Portland 115kV breaker '92712'		ME (100%)
b1002	Replace Hunterstown 115 kV breaker '96392'		ME (100%)
b1003	Replace Hunterstown 115 kV breaker '96292'		ME (100%)
b1004	Replace Hunterstown 115 kV breaker '99192'		ME (100%)
b1061	Replace existing Yorkana 230/115 kV transformer banks 1 and 4 with a single, larger transformer similar to transformer bank #3		ME (100%)
b1061.1	Replace the Yorkana 115 kV breaker '97282'		ME (100%)
b1061.2	Replace the Yorkana 115 kV breaker 'B282'		ME (100%)
b1302	Replace the limiting bus conductor and wave trap at the Jackson 115 kV terminal of the Jackson – JE Baker Tap 115 kV line		ME (100%)
b1365	Reconductor the Middletown – Collins 115 kV (975) line 0.32 miles of 336 ACSR		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b1366	Reconductor the Collins – Cly – Newberry 115 kV (975) line 5 miles with 795 ACSR		ME (100%)
b1727	Reconductor 2.4 miles of existing 556 and 795 ACSR from Harley Davidson to Pleasureville 115 kV with 795 ACSS to raise the ratings		ME (100%)
b1800	Install a 500 MVAR SVC at the existing Hunterstown 500kV substation		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> ATSI (0.42%) / BGE (55.33%) / DL (0.15%) / DPL (19.19%) / ME (24.91%)
b1801	Build a 250 MVAR SVC at Altoona 230 kV		AEC (6.47%) / AEP (2.58%) / APS (6.88%) / BGE (6.57%) / DPL (12.39%) / Dominion (14.89%) / JCPL (8.14%) / ME (6.21%) / Neptune* (0.82%) / PECO (21.56%) / PPL (4.89%) / PSEG (8.18%) / RE (0.33%) / ECP** (0.09%)

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1816.5	Replace SCCIR (Sub-conductor) at Hunterstown Substation on the No. 1, 230/115 kV transformer	ME (100%)
b1999	Replace limiting wave trap, circuit breaker, substation conductor, relay and current transformer components at Northwood	ME (100%)
b2000	Replace limiting wave trap on the Glendon - Hosensack line	ME (100%)
b2001	Replace limiting circuit breaker and substation conductor transformer components at Portland 230kV	ME (100%)
b2002	Northwood 230/115 kV Transformer upgrade	ME (100%)
b2023	Construct a new North Temple - Riverview - Cartech 69 kV line (4.7 miles) with 795 ACSR	ME (100%)
b2024	Upgrade 4/0 substation conductors at Middletown 69 kV	ME (100%)
b2025	Upgrade 4/0 and 350 Cu substation conductors at the Middletown Junction terminal of the Middletown Junction - Wood Street Tap 69 kV line	ME (100%)
b2026	Upgrade an OC protection relay at the Baldy 69 kV substation	ME (100%)
b2148	Install a 115 kV 28.8 MVAR capacitor at Pleasureville substation	ME (100%)

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2149 Upgrade substation riser on the Smith St. - York Inc. 115 kV line		ME (100%)
b2150 Upgrade York Haven structure 115 kV bus conductor on Middletown Jct. - Zions View 115 kV		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.



## SCHEDULE 12 – APPENDIX

### (7) Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.1	Build 500 kV substation in PENELEC – Tap the Keystone – Juniata and Conemaugh – Juniata 500 kV, connect the circuits with a breaker and half scheme, and install new 400 MVAR capacitor	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0284.3	Replace wave trap and upgrade a bus section at Keystone 500 kV – on the Keystone – Airydale 500 kV	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0285.1	Replace wave trap at Keystone 500 kV – on the Keystone – Conemaugh 500 kV	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0285.2	Replace wave trap and relay at Conemaugh 500 kV – on the Conemaugh – Keystone 500 kV	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)

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\*\*\*Hudson Transmission Partners, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0349	Upgrade Rolling Meadows-Gore Jct 115 kV	PENELEC (100%)
b0360	Construction of a ring bus on the 345 kV side of Wayne substation	PENELEC (100%)
b0365	Add a 50 MVAR, 230 kV cap bank at Altoona 230 kV	PENELEC (100%)
b0369	Install 100 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0370	Install 500 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)

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\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0376	Install 300 MVAR capacitor at Conemaugh 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.11%) / BGE (14.99%) / DL (0.25%) / ECP (0.76%) / HTP (0.70%) / JCPL (19.52%) / ME (11.95%) / NEPTUNE (2.12%) / PECO (19.24%) / PSEG (24.38%) / RE (0.98%)</p>
b0442	Spare Keystone 500/230 kV transformer	PENELEC (100%)
b0515	Replace Lewistown circuit breaker 1LY Yeagertown	PENELEC (100%)
b0516	Replace Lewistown circuit breaker 2LY Yeagertown	PENELEC (100%)
b0517	Replace Shawville bus section circuit breaker	PENELEC (100%)
b0518	Replace Homer City circuit breaker 201 Johnstown	PENELEC (100%)

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\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0519	Replace Keystone circuit breaker 4 Transformer - 20	PENELEC (100%)
b0549	Install 250 MVAR capacitor at Keystone 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.17%) / ATSI (0.35%) / BGE (20.18%) / DL (0.15%) / ECP (0.60%) / HTP (0.54%) / JCPL (17.10%) / ME (13.58%) / NEPTUNE (1.86%) / PECO (19.27%) / PSEG (20.38%) / RE (0.82%)</p>
b0550	Install 25 MVAR capacitor at Lewis Run 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0551	Install 25 MVAR capacitor at Saxton 115 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)

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\*\* East Coast Power, L.L.C.

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**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0552	Install 50 MVAR capacitor at Altoona 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0553	Install 50 MVAR capacitor at Raystown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0555	Install 100 MVAR capacitor at Johnstown 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0556	Install 50 MVAR capacitor at Grover 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0557	Install 75 MVAR capacitor at East Towanda 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0563	Install 25 MVAR capacitor at Farmers Valley 115 kV substation	PENELEC (100%)
b0564	Install 10 MVAR capacitor at Ridgeway 115 kV substation	PENELEC (100%)

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\*\* East Coast Power, L.L.C.



**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0654	Reconfigure the Cambria Slope 115 kV and Wilmore Junction 115 kV stations to eliminate Wilmore Junction 115 kV 3-terminal line	PENELEC (100%)
b0655	Reconfigure and expand the Glade 230 kV ring bus to eliminate the Glade Tap 230 kV 3-terminal line	PENELEC (100%)
b0656	Add three breakers to form a ring bus at Altoona 230 kV	PENELEC (100%)
b0794	Upgrade the Homer City 230 kV breaker 'Pierce Road'	PENELEC (100%)
b1005	Replace Glory 115 kV breaker '#7 XFMR'	PENELEC (100%)
b1006	Replace Shawville 115 kV breaker 'NO.14 XFMR'	PENELEC (100%)
b1007	Replace Shawville 115 kV breaker 'NO.15 XFMR'	PENELEC (100%)
b1008	Replace Shawville 115 kV breaker '#1B XFMR'	PENELEC (100%)
b1009	Replace Shawville 115 kV breaker '#2B XFMR'	PENELEC (100%)
b1010	Replace Shawville 115 kV breaker 'Dubois'	PENELEC (100%)

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\*\* East Coast Power, L.L.C.



**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1011	Replace Shawville 115 kV breaker 'Philipsburg'	PENELEC (100%)
b1012	Replace Shawville 115 kV breaker 'Garman'	PENELEC (100%)
b1059	Replace a CRS relay at Hooversville 115 kV station	PENELEC (100%)
b1060	Replace a CRS relay at Rachel Hill 115 kV station	PENELEC (100%)
b1153	Upgrade Conemaugh 500/230 kV transformer and add a new line from Conemaugh-Seward 230 kV	AEC (3.74%) / APS (6.26%) / BGE (16.82%) / DL (0.32%) / JCPL (12.57%) / ME (6.89%) / PECO (11.53%) / PEPCO (0.55%) / PPL (15.42%) / PSEG (20.52%) / RE (0.72%) / NEPTUNE* (1.70%) / ECP** (2.96%)
b1153.1	Revise the reclosing on the Shelocta 115 kV breaker 'Lucerne'	PENELEC (100%)
b1169	Replace Shawville 115 kV breaker '#1A XFMR'	PENELEC (100%)
b1170	Replace Shawville 115 kV breaker '#2A XFMR'	PENELEC (100%)
b1277	Build a new Osterburg East – Bedford North 115 kV Line, 5.7 miles of 795 ACSR	PENELEC (100%)
b1278	Install 25 MVAR Capacitor Bank at Somerset 115 kV	PENELEC (100%)

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1367 Replace the Cambria Slope 115/46 kV 50 MVA transformer with 75 MVA		PENELEC (100%)
b1368 Replace the Claysburg 115/46 kV 30 MVA transformer with 75 MVA		PENELEC (100%)
b1369 Replace the 4/0 CU substation conductor with 795 ACSR on the Westfall S21 Tap 46 kV line		PENELEC (100%)
b1370 Install a 3rd 115/46 kV transformer at Westfall		PENELEC (100%)
b1371 Reconductor 2.6 miles of the Claysburg – HCR 46 kV line with 636 ACSR		PENELEC (100%)
b1372 Replace 4/0 CU substation conductor with 795 ACSR on the Hollidaysburg – HCR 46 kV		PENELEC (100%)
b1373 Re-configure the Erie West 345 kV substation, add a new circuit breaker and relocate the Ashtabula line exit		PENELEC (100%)
b1374 Replace wave traps at Raritan River and Deep Run 115 kV substations with higher rated equipment for both B2 and C3 circuits		PENELEC (100%)
b1535 Reconductor 0.8 miles of the Gore Junction – ESG Tap 115 kV line with 795 ACSR		PENELEC (100%)

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\*\* East Coast Power, L.L.C.

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1607	Reconductor the New Baltimore - Bedford North 115 kV	PENELEC (100%)
b1608	Construct a new 345/115 kV substation and loop the Mansfield - Everts 115 kV	APS (8.61%) / PECO (1.72%) / PENELEC (89.67%)
b1609	Construct Four Mile Junction 230/115 kV substation. Loop the Erie South - Erie East 230 kV line, Buffalo Road - Corry East and Buffalo Road - Erie South 115 kV lines	APS (4.86%) / PENELEC (95.14%)
b1610	Install a new 230 kV breaker at Yeagertown	PENELEC (100%)
b1713	Install a 345 kV breaker at Erie West and relocate Ashtabula 345 kV line	PENELEC (100%)
b1769	Install a 75 MVAR cap bank on the Four Mile 230 kV bus	PENELEC (100%)
b1770	Install a 50 MVAR cap bank on the Buffalo Road 115 kV bus	PENELEC (100%)
b1802	Build a 100 MVAR Fast Switched Shunt and 200 MVAR Switched Shunt at Mansfield 345 kV	AEC (6.47%) / AEP (2.58%) / APS (6.88%) / BGE (6.57%) / / DPL (12.39%) / Dominion (14.89%) / JCPL (8.14%) / ME (6.21%) / NEPTUNE* (0.82%) / PECO (21.56%) / PPL (4.89%) / PSEG (8.18%) / RE (0.33%) / ECP** (0.09%)

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\*\* East Coast Power, L.L.C.

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1821	Replace the Erie South 115 kV breaker 'Union City'	PENELEC (100%)
b1943	Construct a 115 kV ring bus at Claysburg Substation. Bedford North and Saxton lines will no longer share a common breaker	PENELEC (100%)
b1944	Reconductor Eclipse substation 115 kV bus with 1033 kcmil conductor	PENELEC (100%)
b1945	Install second 230/115 kV autotransformer at Johnstown	PENELEC (100%)
b1966	Replace the 1200 Amp Line trap at Lewistown on the Raystown-Lewistown 230 kV line and replace substation conductor at Lewistown	PENELEC (100%)
b1967	Replace the Blairsville 138/115 kV transformer	PENELEC (100%)
b1990	Install a 25 MVAR 115 kV Capacitor at Grandview	PENELEC (100%)
b1991	Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the Homer City-Stolle Road 345 kV line into Farmers Valley	PENELEC (100%)
b1992	Reconductor Cambria Slope-Summit 115kV with 795 ACSS Conductor	PENELEC (100%)

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\*\* East Coast Power, L.L.C.

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1993	Relocate the Erie South 345 kV line terminal	APS (10.09%) / ECP** (0.45%) / HTP (0.49%) / JCPL (5.14%) / Neptune* (0.54%) / PENELEC (70.71%) / PSEG (12.10%) / RE (0.48%)
b1994	Convert Lewis Run-Farmers Valley to 230 kV using 1033.5 ACSR conductor. Project to be completed in conjunction with new Farmers Valley 345/230 kV transformation	APS (33.20%) / ECP** (0.44%) / HTP (0.44%) / JCPL (8.64%) / ME (5.52%) / Neptune (0.86%) / PENELEC (36.81%) / PSEG (13.55%) / RE (0.54%)
b1995	Change CT Ratio at Claysburg	PENELEC (100%)
b1996.1	Replace 600 Amp Disconnect Switches on Ridgeway-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1996.2	Reconductor Ridgeway and Whetstone 115 kV Bus	PENELEC (100%)
b1996.3	Replace Wave Trap at Ridgeway	PENELEC (100%)
b1996.4	Change CT Ratio at Ridgeway	PENELEC (100%)
b1997	Replace 600 Amp Disconnect Switches on Dubois-Harvey Run-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville		PENELEC (100%)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

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\*\* East Coast Power, L.L.C.

## SCHEDULE 12 – APPENDIX

### (9) PPL Electric Utilities Corporation

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0074	Rebuild 12 miles of S. Akron – Berks 230 kV to double circuit, looping Met Ed's S. Lebanon – S. Reading line into Berks; replacement of S. Reading 230 kV breaker 107252	PPL (100%)
b0171.2	Replace wavetrapp at Hosensack 500kV substation to increase rating of Elroy - Hosensack 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.78%) / DPL (6.88%) / JCPL (10.93%) / ME (2.74%) / NEPTUNE (0.27%) / PECO (48.97%) / PSEG (24.45%) / RE (0.98%)</p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0172.1	Replace wave trap at Alburdis 500kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)</p>
b0284.2	Replace two wave traps at Juniata 500 kV – on the two Juniata – Airydale 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.11%) / BGE (14.99%) / DL (0.25%) / ECP (0.76%) / HTP (0.70%) / JCPL (19.52%) / ME (11.95%) / NEPTUNE (2.12%) / PECO (19.24%) / PSEG (24.38%) / RE (0.98%)</p>
b0284.4	Changes at Juniata 500 kV substation	PPL (100%)
b0293.1	Replace wavetrap at the Martins Creek 230 kV bus	PPL (100%)

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**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0293.2	Raise the operating temperature of the 2-1590 ACSR to 140C for the Martins Creek – Portland 230 kV circuit		PPL (100%)
b0440	Spare Juniata 500/230 kV transformer		PPL (100%)
b0468	Build a new substation with two 150 MVA transformers between Dauphin and Hummelstown 230/69 kV substations by sectionalizing the Middletown Junction – New Lebanon 230 kV line		JCPL (4.55%) / Neptune* (0.37%) / PECO (1.79%) / PENELEC (0.33%) / PPL (86.63%) / ECP** (0.18%) / PSEG (5.93%) / RE (0.22%)
b0469	Install 130 MVAR capacitor at West Shore 230 kV line		PPL (100%)
b0487	Build new 500 kV transmission facilities from Susquehanna to Pennsylvania – New Jersey border at Bushkill		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> ECP (2.63%) / HTP (2.97%) / JCPL (30.22%) / NEPTUNE (3.81%) / PSEG (58.04%) / RE (2.33%)

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The Annual Revenue Requirements associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-8G.

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0487.1	Install Lackawanna 500/230 kV transformer and upgrade 230 kV substation and switchyard	PENELEC (16.90%) / PPL (77.59%) / ECP** (0.19%) / PSEG (5.13%) / RE (0.19%)
b0500.1	Conastone – Otter Creek 230 kV – Reconductor approximately 17.2 miles of 795 kmil ACSR with new 795 kmil ACSS operated at 160 deg C	AEC (6.27%) / DPL (8.65%) / JCPL (14.54%) / ME (10.59%) / Neptune* (1.37%) / PECO (15.66%) / PPL (21.02%) / ECP** (0.57%) / PSEG (20.56%) / RE (0.77%)
b0558	Install 250 MVAR capacitor at Juniata 500 kV substation	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0593	Eldred – Pine Grove 69 kV line Rebuild Part 2: 8 miles	PPL (100%)
b0595	Rebuild Lackawanna – Edella 69 kV line to double circuit	PPL (100%)
b0596	Reconductor and rebuild Stanton – Providence 69 kV #1 and #2 lines with 69 kV design; approximately 8 miles total	PPL (100%)
b0597	Reconductor Suburban – Providence 69 kV #1 and resectionalize the Suburban 69 kV lines	PPL (100%)

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**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0598	Reconductor Suburban Taps #1 and #2 for 69 kV line portions		PPL (100%)
b0600	Tripp Park Substation: 69 kV tap off Stanton – Providence 69 kV line #3 to new substation		PPL (100%)
b0601	Jessup Substation: New 138/69 kV tap off of Peckville – Jackson 138/69 kV line		PPL (100%)
b0604	Add 150 MVA, 230/138/69 transformer #6 to Harwood substation		PPL (100%)
b0605	Reconductor Stanton – Old Forge 69 kV line and resectionalize the Jenkins – Scranton 69 kV #1 and #2 lines		PPL (100%)
b0606	New 138 kV tap off Monroe – Jackson 138 kV #1 line to Bartonsville substation		PPL (100%)
b0607	New 138 kV taps off Monroe – Jackson 138 kV lines to Stroudsburg substation		PPL (100%)
b0608	New 138 kV tap off Siegfried – Jackson 138 kV #2 to transformer #2 at Gilbert substation		PPL (100%)
b0610	At South Farmersville substation, a new 69 kV tap off Nazareth – Quarry #2 to transformer #2		PPL (100%)
b0612	Rebuild Siegfried – North Bethlehem portion (6.7 miles) of Siegfried – Quarry 69 kV line		PPL (100%)
b0613	East Tannersville Substation: New 138 kV tap to new substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0614	Elroy substation expansion and new Elroy – Hatfield 138/69 kV double circuit lines (1.9 miles)		PPL (100%)
b0615	Reconductor and rebuild 12 miles of Seidersville – Quakerstown 138/69 kV and a new 75 MVA, 230/69 kV transformer #4		PPL (100%)
b0616	New Springfield 230/69 kV substation and transmission line connections		PPL (100%)
b0620	New 138 kV line and terminal at Monroe 230/138 substation		PPL (100%)
b0621	New 138 kV line and terminal at Siegfried 230/138 kV substation and add a second circuit to Siegfried – Jackson for 8.0 miles		PPL (100%)
b0622	138 kV yard upgrades and transmission line rearrangements at Jackson 138/69 kV substation		PPL (100%)
b0623	New West Shore – Whitehill Taps 138/69 kV double circuit line (1.3 miles)		PPL (100%)
b0624	Reconductor Cumberland – Wertzville 69 kV portion (3.7 miles) of Cumberland – West Shore 69 kV line		PPL (100%)
b0625	Reconductor Mt. Allen – Rossmoyne 69 kV portions (1.6 miles) of West Shore – Cumberland #3 and #4 lines		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0627	Replace UG cable from Walnut substation to Center City Harrisburg substation for higher ampacity (0.25 miles)		PPL (100%)
b0629	Lincoln substation: 69 kV tap to convert to modified Twin A		PPL (100%)
b0630	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild from Landisville Tap – Mt. Joy (2 miles)		PPL (100%)
b0631	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild to double circuit from Mt. Joy – Donegal (2 miles)		PPL (100%)
b0632	Terminate new S. Manheim – Donegal 69 kV circuit into S. Manheim 69 kV #3		PPL (100%)
b0634	Rebuild S. Manheim – Fuller 69 kV portion (1.0 mile) of S. Manheim – West Hempfield 69 kV #3 line into a 69 kV double circuit		PPL (100%)
b0635	Reconductor Fuller Tap – Landisville 69 kV (4.1 miles) into a 69 kV double circuit		PPL (100%)
b0703	Berks substation modification on Berks – South Akron 230 kV line. Modification will isolate the line fault on the South Akron line and will allow Berks transformer #2 to be energized by the South Lebanon 230 kV circuit		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0705	New Derry – Millville 69 kV line		PPL (100%)
b0707	Construct Bohemia – Twin Lakes 69 kV line, install a 10.9 MVAR capacitor bank near Bohemia 69 kV substation		PPL (100%)
b0708	New 69 kV double circuit from Jackson – Lake Naomi Tap		PPL (100%)
b0709	Install new 69 kV double circuit from Carlisle – West Carlisle		PPL (100%)
b0710	Install a third 69 kV line from Reese’s Tap to Hershey substation		PPL (100%)
b0711	New 69 kV that taps West Shore – Cumberland 69 kV #1 to Whitehill 69 kV substation		PPL (100%)
b0712	Construct a new 69 kV line between Strassburg Tap and the Millwood – Engleside 69 kV #1 line		PPL (100%)
b0713	Construct a new 138 kV double circuit line between Dillersville Tap and the West Hempfield – Prince 138 kV line		PPL (100%)
b0714	Prepare Roseville Tap for 138 kV conversion		PPL (100%)
b0715	Transfer S. Akron – S. Manheim #1 and #2 lines from the S. Akron 69 kV Yard to the S. Akron 138 kV Yard; Install switches on S. Akron – S. Manheim 138 kV #1 and #2 lines		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0716	Add a second 69 kV line from Morgantown – Twin Valley		PPL (100%)
b0717	Rebuild existing Brunner Island – West Shore 230 kV line and add a second Brunner Island – West Shore 230 kV line		PPL (100%)
b0718	SPS scheme to drop 190 MVA of 69 kV radial load at West Shore and 56 MVA of 69 kV radial load at Cumberland		PPL (100%)
b0719	SPS scheme at Jenkins substation to open the Stanton #1 and Stanton #2 230 kV circuit breakers after the second contingency		PPL (100%)
b0791	Add a fourth 230/69 kV transformer at Stanton		PENELEC (9.55%) / PPL (90.45%)
b1074	Install motor operators on the Jenkins 230 kV ‘2W’ disconnect switch and build out Jenkins Bay 3 and have MOD ‘3W’ operated as normally open		PPL (100%)
b0881	Install motor operators on Susquehanna T21 - Susquehanna 230 kV line East CB at Susquehanna 230 kV switching station		PPL (100%)
b0908	Install motor operators at South Akron 230 kV		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0909	Convert Jenkins 230 kV yard into a 3-breaker ring bus		PPL (100%)
b0910	Install a second 230 kV line between Jenkins and Stanton		PPL (100%)
b0911	Install motor operators at Frackville 230 kV		PPL (100%)
b0912	Install 2, 10.8 MVAR capacitor banks at Scranton 69 kV		PPL (100%)
b0913	Extend Cando Tap to the Harwood-Jenkins #2 69 kV line		PPL (100%)
b0914	Build a 3rd 69 kV line from Harwood to Valmont Taps		PPL (100%)
b0915	Replace Walnut-Center City 69 kV cable		PPL (100%)
b0916	Reconductor Sunbury-Dalmatia 69 kV line		PPL (100%)
b1021	Install a new (#4) 138/69 kV transformer at Wescosville		PPL (100%)
b1196	Remove the Siegfried bus tie breaker and install a new breaker on the Martins Creek 230 kV line west bay to maintain two ties between the 230 kV buses		PPL (100%)
b1201	Rebuild the Hercules Tap to Double Circuit 69 kV		PPL (100%)



**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1202	Mack-Macungie Double Tap, Single Feed Arrangement		PPL (100%)
b1203	Add the 2nd Circuit to the East Palmerton-Wagners-Lake Naomi 138/69 kV Tap		PPL (100%)
b1204	New Breinigsville 230-69 kV Substation		PPL (100%)
b1205	Siegfried-East Palmerton #1 69 kV Line- Install new 69 kV LSAB, Sectionalize, and Transfer Treichlers Substation		PPL (100%)
b1206	Siegfried-Quarry #1 & #2 69 kV Lines- Rebuild 3.3 mi from Quarry Substation to Macada Taps		PPL (100%)
b1209	Convert Neffsville Taps from 69 kV to 138 kV Operation		PPL (100%)
b1210	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 1 – operate on the 69 kV system)		PPL (100%)
b1211	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 2 – operate on the 138 kV system)		PPL (100%)
b1212	New 138 kV Taps to Flory Mill 138/69 kV Substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1213	Convert East Petersburg Taps from 69 kV to 138 kV operation, install two 10.8 MVAR capacitor banks	PPL (100%)
b1214	Terminate South Manheim-Donegal #2 at South Manheim, Reduce South Manheim 69 kV Capacitor Bank, Resectionalize 69 kV	PPL (100%)
b1215	Reconductor and rebuild 16 miles of Peckville-Varden 69 kV line and 4 miles of Blooming Grove-Honesdale 69 kV line	PPL (100%)
b1216	Build approximately 2.5 miles of new 69 kV transmission line to provide a “double tap – single feed” connection to Kimbles 69/12 kV substation	PPL (100%)
b1217	Provide a “double tap – single feed” connection to Tafton 69/12 kV substation	PPL (100%)
b1524	Build a new Pocono 230/69 kV substation	PPL (100%)
b1524.1	Build approximately 14 miles new 230 kV South Pocono – North Pocono line	PPL (100%)
b1524.2	Install MOLSABs at Mt. Pocono substation	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1525	Build new West Pocono 230/69 kV Substation	PPL (100%)
b1525.1	Build approximately 14 miles new 230 kV Jenkins-West Pocono 230 kV Line	PPL (100%)
b1525.2	Install Jenkins 3E 230 kV circuit breaker	PPL (100%)
b1526	Install a new Honeybrook – Twin Valley 69/138 kV tie	PPL (100%)
b1527	Construct a new 230/69 kV North Lancaster substation. The sub will be supplied from the SAKR-BERK 230kV Line	PPL (100%)
b1527.1	Construct new 69/138 kV transmission from North Lancaster 230/69 kV sub to Brecknock and Honeybrook areas	PPL (100%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlerstown #1 & #2 69 kV lines at East Texas Substation	PPL (100%)
b1529	Add a double breaker 230 kV bay 3 at Hosensack	PPL (100%)
b1530	Replace Lock Haven 69kV ring bus with standard breaker and half design	PPL (100%)
b1532	Install new 32.4 MVAR capacitor bank at Sunbury	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1533	Rebuild Lycoming-Lock Haven #1 and Lycoming-Lock Haven #2 69kV lines		PPL (100%)
b1534	Rebuild 1.4 miles of the Sunbury-Milton 69kV		PPL (100%)
b1601	Re-configure the Breinigsville 500 kV substation with addition two 500 kV circuit breakers		AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)†
b1602	Re-configure the Elimsport 230 kV substation to breaker and half scheme and install 80 MVAR capacitor		PPL (100%)
b1740	Install a 90 MVAR cap bank on the Frackville 230 kV bus #207973		PPL (100%)
b1756	Install a 3rd West Shore 230/69 kV transformer		PPL (100%)
b1757	Install a 230 kV motor-operated air-break switch on the Clinton - Elimsport 230 kV line		PPL (100%)

\* Neptune Regional Transmission System, LLC

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**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1758	Rebuild 1.65 miles of Columbia - Danville 69 kV line		PPL (100%)
b1759	Install a 69 kV 16.2 MVAR Cap at Milton substation		PPL (100%)
b1760	Install motor operated devices on the existing disconnect switches that are located on each side of all four 230 kV CBs at Stanton		PPL (100%)
b1761	Build a new Paupack - North 230 kV line (Approximately 21 miles)		PPL (100%)
b1762	Replace 3.7 miles of the existing 230 kV Blooming Grove - Peckville line by building 8.4 miles of new 230 kV circuit onto the Lackawanna - Hopatcong tower-line		PPL (100%)
b1763	Re-terminate the Peckville - Jackson and the Peckville - Varden 69 kV lines from Peckville into Lackawanna		PPL (100%)
b1764	Build a new 230-69 kV substations (Paupack)		PPL (100%)
b1765	Install a 16.2 MVAR capacitor bank at Bohemia 69-12 kV substation		PPL (100%)
b1766	Reconductor/rebuild 3.3 miles of the Siegfried - Quarry #1 and #2 lines		PPL (100%)
b1767	Install 6 motor-operated disconnect switches at Quarry substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1788	Install a new 500 kV circuit breaker at Wescosville		PPL (100%)
b1890	Add a second 230/69 kV transformer at North Pocono (NE/Pocono Reliability Project)		PPL (100%)
b1891	Build a new 230/138 kV Yard at Lackawanna (138 kV conversion from Lackawanna to Jenkins)		PPL (100%)
b1892	Rebuild the Throop Taps for 138 kV operation (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1893	Swap the Staton - Old Forge and Stanton - Brookside 69 kV circuits at Stanton (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1894	Rebuild and re-conductor 2.5 miles of the Stanton - Avoca 69 kV line		PPL (100%)
b1895	Rebuild and re-conductor 4.9 miles of the Stanton - Providence #1 69 kV line		PPL (100%)
b1896	Install a second 230/138 kV transformer and expand the 138 kV yard at Monroe		PPL (100%)
b1897	Build a new 230/138 kV substation at Jenkins (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1898	Install a 69 kV Tie Line between Richfield and Dalmatia substations		PPL (100%)
b2004	Replace the CTs and switch in South Akron Bay 4 to increase the rating		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2005	Replace the CTs and switch in SAKR Bay 3 to increase the rating of the Millwood-South Akron 230 kV Line and of the rating in Bay 3	PPL (100%)
b2006	Install North Lancaster 500/230 kV substation (below 500 kV portion)	AEC (1.10%) / ECP** (0.37%) / HTP (0.37%) / JCPL (9.61%) / ME (19.42%) / Neptune* (0.75%) / PECO (6.01%) / PPL (50.57%) / PSEG (11.35%) / RE (0.45%)
b2006.1	Install North Lancaster 500/230 kV substation (500 kV portion)	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> ME (22.53%) / PPL (77.47%)
b2007	Install a 90 MVAR capacitor bank at the Frackville 230 kV Substation	PPL (100%)
b2158	Install 10.8 MVAR capacitor at West Carlisle 69/12 kV substation	PPL (100%)

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## SCHEDULE 12 – APPENDIX

### (10) Potomac Electric Power Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0146	Installation of (2) new 230 kV circuit breakers at Quince Orchard substation on circuits 23028 and 23029	PEPCO (100%)
b0219	Install two new 230 kV circuits between Palmers Corner and Blue Plains	PEPCO (100%)
b0228	Upgrade Burtonsville – Sandy Springs 230 kV circuit	PEPCO (100%)
b0238.1	Modify Dickerson Station H 230 kV	PEPCO (100%)
b0251	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0252	Install 100 MVAR of 230 kV capacitors at Bells Mill	PEPCO (100%)
b0288	Brighton Substation – add 2 <sup>nd</sup> 1000 MVA 500/230 kV transformer, 2 500 kV circuit breakers and miscellaneous bus work	BGE (19.33%) / Dominion (17%) / PEPCO (63.67%)
b0319	Add a second 1000 MVA Bruches Hill 500/230 kV transformer	PEPCO (100%)
b0366	Install a 4 <sup>th</sup> Ritchie 230/69 kV transformer	PEPCO (100%)

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\*\* East Coast Power, L.L.C.

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.



# **Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0367.1	Reconductor circuit “23035” for Dickerson – Quince Orchard 230 kV	AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)
b0367.2	Reconductor circuit “23033” for Dickerson – Quince Orchard 230 kV	AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)
b0375	Install 0.5% reactor at Dickerson on the Pleasant View – Dickerson 230 kV circuit	AEC (1.02%) / BGE (25.42%) / DPL (2.97%) / ME (1.72%) / PECO (3.47%) / PEPCO (65.40%)
b0467.1	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.54%) / PEPCO (41.86%) / PPL (2.07%)
b0478	Reconductor the four circuits from Burches Hill to Palmers Corner	APS (1.68%) / BGE (1.83%) / PEPCO (96.49%)
b0496	Replace existing 500/230 kV transformer at Brighton	APS (5.67%) / BGE (29.68%) / Dominion (10.91%) / PEPCO (53.74%)
b0499	Install third Burches Hill 500/230 kV transformer	APS (3.54%) / BGE (7.31%) / PEPCO (89.15%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.7	Advance n0772 (Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.8	Advance n0773 (Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.9	Advance n0774 (Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.10	Advance n0775 (Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.11	Advance n0776 (Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.12	Advance n0777 (Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.13	Advance n0778 (Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.14	Advance n0779 (Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.15	Advance n0780 (Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.16	Advance n0781 (Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.17	Advance n0782 (Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.18	Advance n0783 (Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.19	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.20	Advance n0785 (Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.21	Advance n0786 (Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.22	Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.23	Advance n0788 (Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.24	Advance n0789 (Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.25	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.26	Advance n0791 (Replace Chalk Point 230 Kv breaker (4C) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.27	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

\* Neptune Regional Transmission System, LLC

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.28	Advance n0793 (Replace Chalk Point 230 Kv breaker (6C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)
b0512.29	Advance n0794 (Replace Chalk Point 230 Kv breaker (7C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0526	Build two Ritchie – Benning Station A 230 kV lines	AEC (0.77%) / BGE (16.76%) / DPL (1.22%) / JCPL (1.39%) / ME (0.59%) / Neptune* (0.13%) / PECO (2.10%) / PEPCO (74.86%) / PSEG (2.10%) / RE (0.08%)
b0561	Install 300 MVAR capacitor at Dickerson Station “D” 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0562	Install 500 MVAR capacitor at Brighton 230 kV substation	AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0637	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0638	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0639	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0640	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0641	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0642	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0643	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0644	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0645	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0646	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0647	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0648	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)
b0649	Replace 13 Oak Grove 230 kV breakers	PEPCO (100%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0701	Expand Benning 230 kV station, add a new 250 MVA 230/69 kV transformer at Benning Station 'A', new 115 kV Benning switching station	BGE (30.57%) / PEPCO (69.43%)
b0702	Add a second 50 MVAR 230 kV shunt reactor at the Benning 230 kV substation	PEPCO (100%)
b0720	Upgrade terminal equipment on both lines	PEPCO (100%)
b0721	Upgrade Oak Grove – Ritchie 23061 230 kV line	PEPCO (100%)
b0722	Upgrade Oak Grove – Ritchie 23058 230 kV line	PEPCO (100%)
b0723	Upgrade Oak Grove – Ritchie 23059 230 kV line	PEPCO (100%)
b0724	Upgrade Oak Grove – Ritchie 23060 230 kV line	PEPCO (100%)
b0730	Add slow oil circulation to the four Bells Mill Road – Bethesda 138 kV lines, add slow oil circulation to the two Buzzard Point – Southwest 138 kV lines; increasing the thermal ratings of these six lines allows for greater adjustment of the O Street phase shifters	PEPCO (100%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0731	Implement an SPS to automatically shed load on the 34 kV Bells Mill Road bus for this N-2 condition. The SPS will be in effect for 2013 and 2014 until a third Bells Mill 230/34 kV is placed in-service in 2015	PEPCO (100%)
b0746	Upgrade circuit for 3,000 amps using the ACCR	AEC (0.73%) / BGE (31.05%) / DPL (1.45%) / PECO (2.46%) / PEPCO (62.88%) / PPL (1.43%)
b0747	Upgrade terminal equipment on both lines: Quince Orchard - Bells Mill 230 kV (030) and (028)	PEPCO (100%)
b0802	Advance n0259 (Replace Dickerson Station H Circuit Breaker 412A)	PEPCO (100%)
b0803	Advance n0260 (Replace Dickerson Station H Circuit Breaker 42A)	PEPCO (100%)
b0804	Advance n0261 (Replace Dickerson Station H Circuit Breaker 42C)	PEPCO (100%)
b0805	Advance n0262 (Replace Dickerson Station H Circuit Breaker 43A)	PEPCO (100%)
b0806	Advance n0264 (Replace Dickerson Station H Circuit Breaker 44A)	PEPCO (100%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0809	Advance n0267 (Replace Dickerson Station H Circuit Breaker 45B)		PEPCO (100%)
b0810	Advance n0270 (Replace Dickerson Station H Circuit Breaker 47A)		PEPCO (100%)
b0811	Advance n0726 (Replace Dickerson Station H Circuit Breaker SPARE )		PEPCO (100%)
b0845	Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker		PEPCO (100%)
b0846	Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker		PEPCO (100%)
b0847	Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker		PEPCO (100%)
b0848	Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker		PEPCO (100%)
b0849	Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker		PEPCO (100%)
b0850	Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker		PEPCO (100%)
b0851	Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker		PEPCO (100%)
b0852	Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker		PEPCO (100%)
b0853	Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker		PEPCO (100%)
b0854	Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker		PEPCO (100%)
b0855	Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker		PEPCO (100%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0856	Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker		PEPCO (100%)
b0857	Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker		PEPCO (100%)
b0858	Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker		PEPCO (100%)
b0859	Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker		PEPCO (100%)
b0860	Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker		PEPCO (100%)
b0861	Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker		PEPCO (100%)
b0862	Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker		PEPCO (100%)
b0863	Replace Chalk Point 230 kV breaker (1C) with 80 kA breaker		PEPCO (100%)
b1104	Replace Burtonsville 230 kV breaker '1C'		PEPCO (100%)
b1105	Replace Burtonsville 230 kV breaker '2C'		PEPCO (100%)
b1106	Replace Burtonsville 230 kV breaker '3C'		PEPCO (100%)
b1107	Replace Burtonsville 230 kV breaker '4C'		PEPCO (100%)
b1125	Convert the 138 kV line from Buzzard 138 - Ritchie 851 to a 230 kV line and Remove 230/138 kV Transformer at Ritchie and install a spare 230/138 kV transformer at Buzzard Pt		APS (4.74%) / PEPCO (95.26%)
b1126	Upgrade the 230 kV line from Buzzard 016 – Ritchie 059		APS (4.74%) / PEPCO (95.26%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1592	Reconductor the Oak Grove – Bowie 230 kV circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1593	Reconductor the Bowie - Burtonsville 230 kV circuit and upgrade terminal equipments at Bowie and Burtonsville 230 kV substations		AEC (2.39%) / APS (3.82%) / BGE (65.72%) / DPL (4.43%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.35%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1594	Reconductor the Oak Grove – Bowie 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1595	Reconductor the Bowie – Burtonsville 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Burtonsville 230 kV substations		AEC (2.38%) / APS (3.84%) / BGE (65.72%) / DPL (4.44%) / JCPL (3.93%) / ME (2.16%) / Neptune* (0.39%) / HTP (0.10%) / PECO (8.33%) / PPL (2.83%) / ECP** (0.13%) / PSEG (5.53%) / RE (0.22%)
b1596	Reconductor the Dickerson station “H” – Quince Orchard 230 kV ‘23032’ circuit and upgrade terminal equipments at Dickerson station “H” and Quince Orchard 230 kV substations		AEC (0.80%) / BGE (33.68%) / DPL (2.09%) / PECO (3.07%) / PEPCO (60.36%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1597	Reconductor the Oak Grove - Aquasco 230 kV '23062' circuit and upgrade terminal equipments at Oak Grove and Aquasco 230 kV substations		AEC (1.44%) / BGE (48.60%) / DPL (2.52%) / PECO (5.00%) / PEPCO (42.44%)
b2008	Reconductor feeder 23032 and 23034 to high temp. conductor (10 miles)		BGE (33.05%) / DPL (1.38%) / PECO (1.35%) / PEPCO (64.22%) /
b2136	Reconductor the Morgantown - V3-017 230 kV '23086' circuit and replace terminal equipments at Morgantown		PEPCO (100%)
b2137	Reconductor the Morgantown - Talbert 230 kV '23085' circuit and replace terminal equipment at Morgantown		PEPCO (100%)
b2138	Replace terminal equipments at Hawkins 230 kV substation		PEPCO (100%)

## SCHEDULE 12 – APPENDIX

### (12) Public Service Electric and Gas Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0025	Convert the Bergen-Leonia 138 Kv circuit to 230 kV circuit.		PSEG (100%)
b0090	Add 150 MVAR capacitor at Camden 230 kV		PSEG (100%)
b0121	Add 150 MVAR capacitor at Aldene 230 kV		PSEG (100%)
b0122	Bypass the Essex 138 kV series reactors		PSEG (100%)
b0125	Add Special Protection Scheme at Bridgewater to automatically open 230 kV breaker for outage of Branchburg – Deans 500 kV and Deans 500/230 kV #1 transformer		PSEG (100%)
b0126	Replace wavetrapp on Branchburg – Flagtown 230 kV		PSEG (100%)
b0127	Replace terminal equipment to increase Brunswick – Adams – Bennetts Lane 230 kV to conductor rating		PSEG (100%)
b0129	Replace wavetrapp on Flagtown – Somerville 230 kV		PSEG (100%)
b0130	Replace all derated Branchburg 500/230 kV transformers		AEC (1.36%) / JCPL (47.76%) / PSEG (50.88%)
b0134	Upgrade or Retension PSEG portion of Kittatinny – Newton 230 kV circuit		JCPL (51.11%) / PSEG (45.96%) / RE (2.93%)

The Annual Revenue Requirement for all Public Service Electric and Gas Company Projects (Required Transmission Enhancements) in this Section 12 shall be as specified in Attachment 7 of Attachment H-10A and under the procedures detailed in Attachment H-10B.

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0145	Build new Essex – Aldene 230 kV cable connected through a phase angle regulator at Essex		PSEG (21.78%) / JCPL (73.45%) / RE (4.77%)
b0157	Add 100MVAR capacitor at West Orange 138kV substation		PSEG (100%)
b0158	Close the Sunnymeade "C" and "F" bus tie		PSEG (100%)
b0159	Make the Bayonne reactor permanent installation		PSEG (100%)
b0160	Relocate the X-2250 circuit from Hudson 1-6 bus to Hudson 7-12 bus		PSEG (100%)
b0161	Install 230/138kV transformer at Metuchen substation		PSEG (99.80%) / RE (0.20%)
b0162	Upgrade the Edison – Meadow Rd 138kV “Q” circuit		PSEG (100%)
b0163	Upgrade the Edison – Meadow Rd 138kV “R” circuit		PSEG (100%)
b0169	Build a new 230 kV section from Branchburg – Flagtown and move the Flagtown – Somerville 230 kV circuit to the new section		AEC (1.72%) / JCPL (25.94%) / Neptune* (10.62%) / PSEG (59.59%) / ECP** (2.13%)
b0170	Reconductor the Flagtown-Somerville-Bridgewater 230 kV circuit with 1590 ACSS		JCLP (42.95%) / Neptune* (17.90%) / PSEG (38.36%) RE (0.79%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0172.2	Replace wave trap at Branchburg 500kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)</p>
b0184	Replace Hudson 230kV circuit breakers #1-2	PSEG (100%)
b0185	Replace Deans 230kV circuit breakers #9-10	PSEG (100%)
b0186	Replace Essex 230kV circuit breaker #5-6	PSEG (100%)
b1082	Install 230/138 kV transformer at Bergen substation	PENELEC (16.52%) / PSEG (80.29%) / RE (3.19%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0201 Branchburg substation: replace wave trap on Branchburg – Readington 230 kV circuit		PSEG (100%)
b0213.1 Replace New Freedom 230 kV breaker BS2-6		PSEG (100%)
b0213.3 Replace New Freedom 230 kV breaker BS2-8		PSEG (100%)
b0274 Replace both 230/138 kV transformers at Roseland		PSEG (96.77%) / ECP** (3.23%)
b0275 Upgrade the two 138 kV circuits between Roseland and West Orange		PSEG (100%)
b0278 Install 228 MVAR capacitor at Roseland 230 kV substation		PSEG (100%)
b0290 Install 400 MVAR capacitor in the Branchburg 500 kV vicinity		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (5.25%) / ECP (1.86%) / HTP (1.58%) / JCPL (26.50%) / ME (0.06%) / NEPTUNE (4.43%) / PECO (9.82%) / PSEG (48.55%) / RE (1.95%)
b0358 Reconnector the PSEG portion of Buckingham – Pleasant Valley 230 kV, replace wave trap and metering transformer		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0368	Reconductor Tosco – G22_MTX 230 kV circuit with 1033 bundled ACSS		PSEG (100%)
b0371	Make the Metuchen 138 kV bus solid and upgrade 6 breakers at the Metuchen substation		PSEG (100%)
b0372	Make the Athenia 138 kV bus solid and upgrade 2 breakers at the Athenia substation		PSEG (100%)
b0395	Replace Hudson 230 kV breaker BS4-5		PSEG (100%)
b0396	Replace Hudson 230 kV breaker BS1-6		PSEG (100%)
b0397	Replace Hudson 230 kV breaker BS3-4		PSEG (100%)
b0398	Replace Hudson 230 kV breaker BS5-6		PSEG (100%)
b0401.1	Replace Roseland 230 kV breaker BS6-7		PSEG (100%)
b0401.2	Replace Roseland 138 kV breaker O-1315		PSEG (100%)
b0401.3	Replace Roseland 138 kV breaker S-1319		PSEG (100%)
b0401.4	Replace Roseland 138 kV breaker T-1320		PSEG (100%)
b0401.5	Replace Roseland 138 kV breaker G-1307		PSEG (100%)
b0401.6	Replace Roseland 138 kV breaker P-1316		PSEG (100%)
b0401.7	Replace Roseland 138 kV breaker 220-4		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0401.8	Replace W. Orange 138 kV breaker 132-4	PSEG (100%)
b0411	Install 4 <sup>th</sup> 500/230 kV transformer at New Freedom	AEC (47.01%) / JCPL (7.04%) / Neptune* (0.28%) / PECO (23.36%) / PSEG (22.31%)
b0423	Reconductor Readington (2555) – Branchburg (4962) 230 kV circuit w/1590 ACSS	PSEG (100%)
b0424	Replace Readington wavetrap on Readington (2555) – Roseland (5017) 230 kV circuit	PSEG (100%)
b0425	Reconductor Linden (4996) – Tosco (5190) 230 kV circuit w/1590 ACSS (Assumes operating at 220 degrees C)	PSEG (100%)
b0426	Reconductor Tosco (5190) – G22_MTX5 (90220) 230 kV circuit w/1590 ACSS (Assumes operation at 220 degrees C)	PSEG (100%)
b0427	Reconductor Athenia (4954) – Saddle Brook (5020) 230 kV circuit river section	PSEG (100%)
b0428	Replace Roseland wavetrap on Roseland (5019) – West Caldwell “G” (5089) 138 kV circuit	PSEG (100%)
b0429	Reconductor Kittatinny (2553) – Newton (2535) 230 kV circuit w/1590 ACSS	JCPL (41.91%) / Neptune* (3.59%) / PSEG (50.59%) / RE (2.23%) / ECP** (1.68%)
b0439	Spare Deans 500/230 kV transformer	PSEG (100%)
b0446.1	Upgrade Bayway 138 kV breaker #2-3	PSEG (100%)
b0446.2	Upgrade Bayway 138 kV breaker #3-4	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0446.3	Upgrade Bayway 138 kV breaker #6-7		PSEG (100%)
b0446.4	Upgrade the breaker associated with TX 132-5 on Linden 138 kV		PSEG (100%)
b0470	Install 138 kV breaker at Roseland and close the Roseland 138 kV buses		PSEG (100%)
b0471	Replace the wave traps at both Lawrence and Pleasant Valley on the Lawrence – Pleasant Vallen 230 kV circuit		PSEG (100%)
b0472	Increase the emergency rating of Saddle Brook – Athenia 230 kV by 25% by adding forced cooling		ECP (2.06%) / PSEG (94.41%) / RE (3.53%)
b0473	Move the 150 MVAR mobile capacitor from Aldene 230 kV to Lawrence 230 kV substation		PSEG (100%)
b0489	Build new 500 kV transmission facilities from Pennsylvania – New Jersey border at Bushkill to Roseland		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)†
			<b>DFAX Allocation:</b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)

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† Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

†† Cost allocations associated with below 500 kV elements of the project

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b489.1	Replace Athenia 230 kV breaker 31H		PSEG (100%)
b489.2	Replace Bergen 230 kV breaker 10H		PSEG (100%)
b489.3	Replace Saddlebrook 230 kV breaker 21P		PSEG (100%)
b0489.4	Install two Roseland 500/230 kV transformers as part of the Susquehanna – Roseland 500 kV project		AEC (5.09%) / ComEd (0.29%) / Dayton (0.03%) / DPL (1.76%) / JCPL (32.73%) / Neptune* (6.32%) / PECO (10.04%) / PENELEC (0.56%) / ECP** (0.95%) / PSEG (40.71%) / RE (1.52%) ††
b0489.5	Replace Roseland 230 kV breaker '42H' with 80 kA		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.6	Replace Roseland 230 kV breaker '51H' with 80 kA	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) / JCPL  (35.20%) / NEPTUNE (3.38%) /  PSEG (52.66%) / RE (2.11%)</p>
b0489.7	Replace Roseland 230 kV breaker '71H' with 80 kA	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) / JCPL  (35.20%) / NEPTUNE (3.38%) /  PSEG (52.66%) / RE (2.11%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.8	Replace Roseland 230 kV breaker '31H' with 80 kA	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%)  / Dayton (2.12%) / DEOK  (3.37%) / DL (1.77%) / DPL  (2.62%) / Dominion (12.39%) /  EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) /  JCPL (35.20%) / NEPTUNE  (3.38%) / PSEG (52.66%) / RE  (2.11%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.9	Replace Roseland 230 kV breaker '11H' with 80 kA	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) /  JCPL (35.20%) / NEPTUNE  (3.38%) / PSEG (52.66%) / RE  (2.11%)</p>
b0489.10	Replace Roseland 230 kV breaker '21H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) /  JCPL (35.20%) / NEPTUNE  (3.38%) / PSEG (52.66%) / RE  (2.11%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.11	Replace Roseland 230 kV breaker '32H'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)
b0489.12	Replace Roseland 230 kV breaker '12H'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.13	Replace Roseland 230 kV breaker '52H'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)
b0489.14	Replace Roseland 230 kV breaker '41H'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ECP (2.86%) / HTP (3.79%) / JCPL (35.20%) / NEPTUNE (3.38%) / PSEG (52.66%) / RE (2.11%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.15	Replace Roseland 230 kV breaker '72H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  ECP (2.86%) / HTP (3.79%) / JCPL  (35.20%) / NEPTUNE (3.38%) /  PSEG (52.66%) / RE (2.11%)</p>
b0498	Loop the 5021 circuit into New Freedom 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (15.37%) / ECP (1.25%) /  HTP (1.05%) / JCPL (28.13%) /  NEPTUNE (3.27%) / PSEG  (48.97%) / RE (1.96%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0498.1	Upgrade the 20H circuit breaker		PSEG (100%)
b0498.2	Upgrade the 22H circuit breaker		PSEG (100%)
b0498.3	Upgrade the 30H circuit breaker		PSEG (100%)
b0498.4	Upgrade the 32H circuit breaker		PSEG (100%)
b0498.5	Upgrade the 40H circuit breaker		PSEG (100%)
b0498.6	Upgrade the 42H circuit breaker		PSEG (100%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0565	Install 100 MVAR capacitor at Cox's Corner 230 kV substation		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0578	Replace Essex 138 kV breaker 4LM (C1355 line to ECRRF)		PSEG (100%)
b0579	Replace Essex 138 kV breaker 1LM (220-1 TX)		PSEG (100%)
b0580	Replace Essex 138 kV breaker 1BM (BS1-3 tie)		PSEG (100%)
b0581	Replace Essex 138 kV breaker 2BM (BS3-4 tie)		PSEG (100%)
b0582	Replace Linden 138 kV breaker 3 (132-7 TX)		PSEG (100%)
b0592	Replace Metuchen 138 kV breaker '2-2 Transfer'		PSEG (100%)
b0664	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0665	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0668	Reconductor with 2x1033 ACSS conductor		JCPL (39.41%) / NEPTUNE* (20.38%) / PSEG (38.76%) / RE (1.45%)
b0671	Replace terminal equipment at both ends of line		PSEG (100%)
b0743	Add a bus tie breaker at Roseland 138 kV		PSEG (100%)
b0812	Increase operating temperature on line for one year to get 925E MVA rating		PSEG (100%)
b0813	Reconductor Hudson – South Waterfront 230 kV circuit		BGE (1.25%) / JCPL (9.92%) / NEPTUNE* (0.87%) / PEPCO (1.11%) / PSEG (83.73%) / RE (3.12%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0814	New Essex – Kearney 138 kV circuit and Kearney 138 kV bus tie		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.1	Replace Kearny 138 kV breaker '1-SHT' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.2	Replace Kearny 138 kV breaker '15HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.3	Replace Kearny 138 kV breaker '14HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.4	Replace Kearny 138 kV breaker '10HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.5	Replace Kearny 138 kV breaker '2HT' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.6	Replace Kearny 138 kV breaker '22HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.7	Replace Kearny 138 kV breaker '4HT' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.8	Replace Kearny 138 kV breaker '25HF' with 80 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.9	Replace Essex 138 kV breaker '2LM' with 63 kA breaker and 2.5 cycle contact parting time		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.10	Replace Essex 138 kV breaker '1BT' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.11	Replace Essex 138 kV breaker '2PM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.12	Replace Marion 138 kV breaker '2HM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.13	Replace Marion 138 kV breaker '2LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.14	Replace Marion 138 kV breaker '1LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.15	Replace Marion 138 kV breaker '6PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.16	Replace Marion 138 kV breaker '3PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.17	Replace Marion 138 kV breaker '4LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0814.18	Replace Marion 138 kV breaker '3LM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.19	Replace Marion 138 kV breaker '1HM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.20	Replace Marion 138 kV breaker '2PM3' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.21	Replace Marion 138 kV breaker '2PM1' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.22	Replace ECRR 138 kV breaker '903'		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.23	Replace Foundry 138 kV breaker '21P'		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.24	Change the contact parting time on Essex 138 kV breaker '3LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.25	Change the contact parting time on Essex 138 kV breaker '2BM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0814.26	Change the contact parting time on Essex 138 kV breaker '1BM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.27	Change the contact parting time on Essex 138 kV breaker '3PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.28	Change the contact parting time on Essex 138 kV breaker '4LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.29	Change the contact parting time on Essex 138 kV breaker '1PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.30	Change the contact parting time on Essex 138 kV breaker '1LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0829	Build Branchburg to Roseland 500 kV circuit as part of Branchburg – Hudson 500 kV project	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0829.6	Replace Branchburg 500 kV breaker 91X	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> PSEG (96.14%) / RE (3.86%)
b0829.9	Replace Branchburg 230 kV breaker 102H	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0829.11	Replace Branchburg 230 kV breaker 32H		PSEG (100%)
b0829.12	Replace Branchburg 230 kV breaker 52H		PSEG (100%)
b0830	Build Roseland - Hudson 500 kV circuit as part of Branchburg – Hudson 500 kV project		AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0830.1	Replace Roseland 230 kV breaker '82H' with 80 kA		PSEG (100%)
b0830.2	Replace Roseland 230 kV breaker '91H' with 80 kA		PSEG (100%)
b0830.3	Replace Roseland 230 kV breaker '22H' with 80 kA		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0831	Replace 138/13 kV transformers with 230/13 kV units as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0832	Build Hudson 500 kV switching station as part of Branchburg – Hudson 500 kV project	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0833	Build Roseland 500 kV switching station as part of Branchburg – Hudson 500 kV project	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0834	Convert the E-1305/F-1306 to one 230 kV circuit as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0835	Build Hudson 230 kV transmission lines as part of Roseland – Hudson 500 kV project as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0836	Install transformation at new Hudson 500 kV switching station and perform Hudson 230 kV and 345 kV station work as part of Branchburg – Hudson 500 kV project	ComEd (2.51%) / Dayton (0.09%) / PENELEC (2.75%) / ECP** (2.45%) / PSEG (88.74%) / RE (3.46%)
b0882	Replace Hudson 230 kV breaker 1HA with 80 kA	PSEG (100%)
b0883	Replace Hudson 230 kV breaker 2HA with 80 kA	PSEG (100%)
b0884	Replace Hudson 230 kV breaker 3HB with 80 kA	PSEG (100%)
b0885	Replace Hudson 230 kV breaker 4HA with 80 kA	PSEG (100%)
b0886	Replace Hudson 230 kV breaker 4HB with 80 kA	PSEG (100%)
b0889	Replace Bergen 230 kV breaker '21H'	PSEG (100%)
b0890	Upgrade New Freedom 230 kV breaker '21H'	PSEG (100%)
b0891	Upgrade New Freedom 230 kV breaker '31H'	PSEG (100%)
b0899	Replace ECRR 138 kV breaker 901	PSEG (100%)
b0900	Replace ECRR 138 kV breaker 902	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1013	Replace Linden 138 kV breaker '7PB'		PSEG (100%)
b1017	Reconductor South Mahwah - Waldwick 345 kV J-3410 circuit		JCPL (29.01%) / NEPTUNE* (2.74%) / PSEG (64.85%) / RE (2.53%) / ECP** (0.87%)
b1018	Reconductor South Mahwah - Waldwick 345 kV K-3411 circuit		JCPL (29.18%) / NEPTUNE* (2.74%) / PSEG (64.68%) / RE (2.53%) / ECP** (0.87%)
b1019.1	Replace wave trap, line disconnect and ground switch at Roseland on the F-2206 circuit		PSEG (100%)
b1019.2	Replace wave trap, line disconnect and ground switch at Roseland on the B-2258 circuit		PSEG (100%)
b1019.3	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.4	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the B-2258 circuit		PSEG (100%)
b1019.5	Replace wave trap, line disconnect and ground switch at Cedar Grove on the F-2206 circuit		PSEG (100%)
b1019.6	Replace line disconnect and ground switch at Cedar Grove on the K-2263 circuit		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1019.7	Replace 2-4 and 4-5 section disconnect and ground switches at Clifton on the B-2258 circuit		PSEG (100%)
b1019.8	Replace 1-2 and 2-3 section disconnect and ground switches at Clifton on the K-2263 circuit		PSEG (100%)
b1019.9	Replace line, ground, 230 kV main bus disconnects at Athenia on the B-2258 circuit		PSEG (100%)
b1019.10	Replace wave trap, line, ground 230 kV breaker disconnect and 230 kV main bus disconnects at Athenia on the K-2263 circuit		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1082.1	Replace Bergen 138 kV breaker '30P' with 80 kA		PSEG (100%)
b1082.2	Replace Bergen 138 kV breaker '80P' with 80 kA		PSEG (100%)
b1082.3	Replace Bergen 138 kV breaker '70P' with 80 kA		PSEG (100%)
b1082.4	Replace Bergen 138 kV breaker '90P' with 63 kA		PSEG (100%)
b1082.5	Replace Bergen 138 kV breaker '50P' with 63 kA		PSEG (100%)
b1082.6	Replace Bergen 230 kV breaker '12H' with 80 kA		PSEG (100%)
b1082.7	Replace Bergen 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1082.8	Replace Bergen 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1082.9	Replace Bergen 230 kV breaker '20H' with 80 kA		PSEG (100%)
b1098	Re-configure the Bayway 138 kV substation and install three new 138 kV breakers		PSEG (100%)
b1099	Build a new 230 kV substation by tapping the Aldene – Essex circuit and install three 230/26 kV transformers, and serve some of the Newark area load from the new station		PSEG (100%)
b1100	Build a new 138 kV circuit from Bayonne to Marion		PSEG (100%)
b1101	Re-configure the Cedar Grove substation with breaker and half scheme and build a new 69 kV circuit from Cedar Grove to Hinchman		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1154	Convert the West Orange 138 kV substation, the two Roseland – West Orange 138 kV circuits, and the Roseland – Sewaren 138 kV circuit from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1155	Build a new 230 kV circuit from Branchburg to Middlesex Sw. Rack. Build a new 230 kV substation at Middlesex		JCPL (4.61%) / PSEG (91.75%) / RE (3.64%)
b1155.3	Replace Branchburg 230 kV breaker '81H' with 63 kA		PSEG (100%)
b1155.4	Replace Branchburg 230 kV breaker '72H' with 63 kA		PSEG (100%)
b1155.5	Replace Branchburg 230 kV breaker '61H' with 63 kA		PSEG (100%)
b1155.6	Replace Branchburg 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156	Convert the Burlington, Camden, and Cuthbert Blvd 138 kV substations, the 138 kV circuits from Burlington to Camden, and the 138 kV circuit from Camden to Cuthbert Blvd. from 138 kV to 230 kV		PSEG (96.18%) / RE (3.82%)
b1156.13	Replace Camden 230 kV breaker '22H' with 80 kA		PSEG (100%)
b1156.14	Replace Camden 230 kV breaker '32H' with 80 kA		PSEG (100%)
b1156.15	Replace Camden 230 kV breaker '21H' with 80 kA		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1156.16	Replace New Freedom 230 kV breaker '50H' with 63 kA		PSEG (100%)
b1156.17	Replace New Freedom 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156.18	Replace New Freedom 230 kV breaker '51H' with 63 kA		PSEG (100%)
b1156.19	Rebuild Camden 230 kV to 80 kA		PSEG (100%)
b1156.20	Rebuild Burlington 230 kV to 80 kA		PSEG (100%)
b1197.1	Reconductor the PSEG portion of the Burlington – Croydon circuit with 1590 ACSS		PSEG (100%)
b1228	Re-configure the Lawrence 230 kV substation to breaker and half		HTP (0.14%) / ECP (0.22%) / PSEG (95.83%) / RE (3.81%)
b1255	Build a new 69 kV substation (Ridge Road) and build new 69 kV circuits from Montgomery – Ridge Road – Penns Neck/Dow Jones		PSEG (96.18%) / RE (3.82%)
b1304.1	Convert the existing 'D1304' and 'G1307' 138 kV circuits between Roseland – Kearny – Hudson to 230 kV operation		AEC (0.23%) / BGE (0.97%) / ComEd (2.32%) / Dayton (0.13%) / JCPL (1.17%) / Neptune (0.07%) / HTP (16.05%) / PENELEC (2.97%) / PEPCO (1.04%) / ECP (2.11%) / PSEG (70.16%) / RE (2.78%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1304.2	Expand existing Bergen 230 kV substation and reconfigure the Athenia 230 kV substation to breaker and a half scheme	AEC (0.23%) / BGE (0.97%) / ComEd (2.32%) / Dayton (0.13%) / JCPL (1.17%) / Neptune (0.07%) / HTP (16.05%) / PENELEC (2.97%) / PEPCO (1.04%) / ECP (2.11%) / PSEG (70.16%) / RE (2.78%)
b1304.3	Build second 230 kV underground cable from Bergen to Athenia	AEC (0.23%) / BGE (0.97%) / ComEd (2.32%) / Dayton (0.13%) / JCPL (1.17%) / Neptune (0.07%) / HTP (16.05%) / PENELEC (2.97%) / PEPCO (1.04%) / ECP (2.11%) / PSEG (70.16%) / RE (2.78%)
b1304.4	Build second 230 kV underground cable from Hudson to South Waterfront	AEC (0.23%) / BGE (0.97%) / ComEd (2.32%) / Dayton (0.13%) / JCPL (1.17%) / Neptune (0.07%) / HTP (16.05%) / PENELEC (2.97%) / PEPCO (1.04%) / ECP (2.11%) / PSEG (70.16%) / RE (2.78%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.5	Replace Athenia 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.6	Replace Athenia 230 kV breaker '41H' with 80 kA		PSEG (100%)
b1304.7	Replace South Waterfront 230 kV breaker '12H' with 80 kA		PSEG (100%)
b1304.8	Replace South Waterfront 230 kV breaker '22H' with 80 kA		PSEG (100%)
b1304.9	Replace South Waterfront 230 kV breaker '32H' with 80 kA		PSEG (100%)
b1304.10	Replace South Waterfront 230 kV breaker '52H' with 80 kA		PSEG (100%)
b1304.11	Replace South Waterfront 230 kV breaker '62H' with 80 kA		PSEG (100%)
b1304.12	Replace South Waterfront 230 kV breaker '72H' with 80 kA		PSEG (100%)
b1304.13	Replace South Waterfront 230 kV breaker '82H' with 80 kA		PSEG (100%)
b1304.14	Replace Essex 230 kV breaker '20H' with 80 kA		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.15	Replace Essex 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.16	Replace Essex 230 kV breaker '10H' with 80 kA		PSEG (100%)
b1304.17	Replace Essex 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1304.18	Replace Essex 230 kV breaker '11HL' with 80 kA		PSEG (100%)
b1304.19	Replace Newport R 230 kV breaker '23H' with 63 kA		PSEG (100%)
b1304.20	Rebuild Athenia 230 kV substation to 80 kA		PSEG (100%)
b1304.21	Rebuild Bergen 230 kV substation to 80 kA		PSEG (100%)
b1398	Build two new parallel underground circuits from Gloucester to Camden		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPSCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.1	Install shunt reactor at Gloucester to offset cable charging		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPSCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.2	Reconfigure the Cuthbert station to breaker and a half scheme		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPSCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.3	Build a second 230 kV parallel overhead circuit from Mickelton – Gloucester		JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPSCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.4	Reconductor the existing Mickleton – Gloucester 230 kV circuit (PSEG portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.7	Reconductor the Camden – Richmond 230 kV circuit (PSEG portion) and upgrade terminal equipments at Camden substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.15	Replace Gloucester 230 kV breaker '21H' with 63 kA	PSEG (100%)
b1398.16	Replace Gloucester 230 kV breaker '51H' with 63 kA	PSEG (100%)
b1398.17	Replace Gloucester 230 kV breaker '56H' with 63 kA	PSEG (100%)
b1398.18	Replace Gloucester 230 kV breaker '26H' with 63 kA	PSEG (100%)
b1398.19	Replace Gloucester 230 kV breaker '71H' with 63 kA	PSEG (100%)
b1399	Convert the 138 kV path from Aldene – Springfield Rd. – West Orange to 230 kV	PSEG (96.18%) / RE (3.82%)
b1400	Install 230 kV circuit breakers at Bennetts Ln. “F” and “X” buses	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1410	Replace Salem 500 kV breaker '11X'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> PSEG (96.14%) / RE (3.86%)
b1411	Replace Salem 500 kV breaker '12X'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> PSEG (96.14%) / RE (3.86%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1412	Replace Salem 500 kV breaker '20X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.14%) / RE (3.86%)</p>
b1413	Replace Salem 500 kV breaker '21X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.14%) / RE (3.86%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1414	Replace Salem 500 kV breaker '31X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.14%) / RE (3.86%)</p>
b1415	Replace Salem 500 kV breaker '32X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.14%) / RE (3.86%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1539	Replace Tosco 230 kV breaker 'CB1' with 63 kA		PSEG (100%)
b1540	Replace Tosco 230 kV breaker 'CB2' with 63 kA		PSEG (100%)
b1541	Open the Hudson 230 kV bus tie		PSEG (100%)
b1588	Reconductor the Eagle Point - Gloucester 230 kV circuit #1 and #2 with higher conductor rating		JCPL (10.31%) / Neptune* (0.98%) / HTP (0.75%) / PECO (30.81%) / ECP** (0.82%) / PSEG (54.17%) / RE (2.16%)
b1589	Re-configure the Kearny 230 kV substation and loop the P-2216-1 (Essex - NJT Meadows) 230 kV circuit		ATSI (8.00%) / HTP (20.18%) / PENELEC (7.77%) / PSEG (61.59%) / RE (2.46%)
b1590	Upgrade the PSEG portion of the Camden Richmond 230 kV circuit to six wire conductor and replace terminal equipment at Camden		BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPCO (1.93%) / PPL (2.46%) / ECP** (0.16%)
b1749	Advance n1237 (Replace Essex 230 kV breaker '22H' with 80kA)		PSEG (100%)
b1750	Advance n0666.5 (Replace Hudson 230 kV breaker '1HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1751	Advance n0666.3 (Replace Hudson 230 kV breaker '2HA' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1752	Advance n0666.10 (Replace Hudson 230 kV breaker '2HB' with 80 kA (without TRV cap, so actually 63 kA))	PSEG (100%)
b1753	Marion 138 kV breaker '7PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1754	Marion 138 kV breaker '3PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1755	Marion 138 kV breaker '6PM' - delay the relay time to increase the contact parting time to 2.5 cycles	PSEG (100%)
b1787	Build a second 230 kV circuit from Cox's Corner - Lumberton	AEC (4.96%) / JCPL (44.20%) / NEPTUNE* (0.53%) / HTP (0.15%) / ECP** (0.16%) / PSEG (48.08%) / RE (1.92%)
b2034	Install a reactor along the Kearny - Essex 138 kV line	PSEG (100%)
b2035	Replace Sewaren 138 kV breaker '11P'	PSEG (100%)
b2036	Replace Sewaren 138 kV breaker '21P'	PSEG (100%)
b2037	Replace PVSC 138 kV breaker '452'	PSEG (100%)
b2038	Replace PVSC 138 kV breaker '552'	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2039	Replace Bayonne 138 kV breaker '11P'		PSEG (100%)
b2139	Reconductor the Mickleton - Gloucester 230 kV parallel circuits with double bundle conductor		PSEG (61.11%) / PECO (36.45%) / RE (2.44%)
b2146	Re-configure the Brunswick 230 kV and 69 kV substations		PSEG (96.16%) / RE (3.84%)
b2151	Construct Jackson Rd. 69 kV substation and loop the Cedar Grove - Hinchmans Ave into Jackson Rd. and construct Hawthorne 69 kV substation and build 69 kV circuit from Hinchmans Ave - Hawthorne - Fair Lawn		PSEG (100%)
b2159	Reconfigure the Linden, Bayway, North Ave, and Passaic Valley S.C. 138 kV substations. Construct and loop new 138 kV circuit to new airport station		PSEG (72.61%) / HTP (24.49%) / RE (2.90%)

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## SCHEDULE 12 – APPENDIX

### (14) Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0216	Install -100/+525 MVAR dynamic reactive device at Black Oak	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (48.02%) / BGE (8.00%) / Dominion (28.85%) / PEPCO (15.13%)
b0218	Install third Wylie Ridge 500/345kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0220	Upgrade coolers on Wylie Ridge 500/345 kV #7	
b0229	Install fourth Bedington 500/138 kV	
b0230	Install fourth Meadowbrook 500/138 kV	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		APS (50.98%) / BGE (13.42%) / DPL (2.03%) / Dominion (14.50%) / ME (1.43%) / PEPCO (17.64%)
		APS (79.16%) / BGE (3.61%) / DPL (0.86%) / Dominion (11.75%) / ME (0.67%) / PEPCO (3.95%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0238	Reconductor Doubs – Dickerson and Doubs – Aqueduct 1200 MVA	As specified under the procedures detailed in Attachment H-18B, Section 1.b	BGE (16.66%) / Dominion (33.66%) / PEPCO (49.68%)
b0240	Open the Black Oak #3 500/138 kV transformer for the loss of Hatfield – Back Oak 500 kV line		APS (100%)
b0245	Replacement of the existing 954 ACSR conductor on the Bedington – Nipetown 138 kV line with high temperature/low sag conductor		APS (100%)
b0246	Rebuild of the Double Tollgate – Old Chapel 138 kV line with 954 ACSR conductor	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)
b0273	Open both North Shenandoah #3 transformer and Strasburg – Edinburgh 138 kV line for the loss of Mount Storm – Meadowbrook 572 500 kV		APS (100%)
b0322	Convert Lime Kiln substation to 230 kV operation		APS (100%)
b0323	Replace the North Shenandoah 138/115 kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)

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†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.2	Build new Meadow Brook – Loudoun 500 kV circuit (20 of 50 miles)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (88.62%) / PEPCO (11.38%)</p>
b0343	Replace Doubs 500/230 kV transformer #2	As specified under the procedures detailed in Attachment H-18B, Section 1.b AEC (1.85%) / BGE (21.49%) / DPL (3.91%) / Dominion (28.86%) / ME (2.97%) / PECO (5.73%) / PEPCO (35.19%)
b0344	Replace Doubs 500/230 kV transformer #3	As specified under the procedures detailed in Attachment H-18B, Section 1.b AEC (1.86%) / BGE (21.50%) / DPL (3.91%) / Dominion (28.82%) / ME (2.97%) / PECO (5.74%) / PEPCO (35.20%)
b0345	Replace Doubs 500/230 kV transformer #4	As specified under the procedures detailed in Attachment H-18B, Section 1.b AEC (1.85%) / BGE (21.49%) / DPL (3.90%) / Dominion (28.83%) / ME (2.98%) / PECO (5.75%) / PEPCO (35.20%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.1	Build new Mt. Storm – 502 Junction 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.2	Build new Mt. Storm – Meadow Brook 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.3	Build new 502 Junction 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.4	Upgrade Meadow Brook 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.5	Replace Harrison 500 kV breaker HL-3	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%)  / Dayton (2.12%) / DEOK  (3.37%) / DL (1.77%) / DPL  (2.62%) / Dominion (12.39%) /  EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>
b0347.6	Upgrade (per ABB inspection) breaker HL-6	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%)  / Dayton (2.12%) / DEOK  (3.37%) / DL (1.77%) / DPL  (2.62%) / Dominion (12.39%) /  EKPC (1.82%) / HTP*** (0.20%)  / JCPL (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.7	Upgrade (per ABB inspection) breaker HL-7	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (62.13%) / PEPCO (37.87%)
b0347.8	Upgrade (per ABB inspection) breaker HL-8	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (62.13%) / PEPCO (37.87%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.9	Upgrade (per ABB inspection) breaker HL-10	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (62.13%) / PEPCO (37.87%)
b0347.10	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-1	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (62.13%) / PEPCO (37.87%)

\*Neptune Regional Transmission System, LLC

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.11	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-3	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>
b0347.12	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-4	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.13	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-6	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>
b0347.14	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-7	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.15	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-9	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>
b0347.16	Upgrade (per ABB inspection) Harrison 500 kV breaker 'HL-3'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>

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\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.17	Replace Meadow Brook 138 kV breaker 'MD-10'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</p>
b0347.18	Replace Meadow Brook 138 kV breaker 'MD-11'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</p>

\*Neptune Regional Transmission System, LLC

\*\*East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.19	Replace Meadow Brook 138 kV breaker 'MD-12'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0347.20	Replace Meadow Brook 138 kV breaker 'MD-13'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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\*\*East Coast Power, L.L.C.



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.21	Replace Meadow Brook 138 kV breaker 'MD-14'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0347.22	Replace Meadow Brook 138 kV breaker 'MD-15'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.23	Replace Meadow Brook 138 kV breaker 'MD-16'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</p>
b0347.24	Replace Meadow Brook 138 kV breaker 'MD-17'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.25	Replace Meadow Brook 138 kV breaker 'MD-18'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0347.26	Replace Meadow Brook 138 kV breaker 'MD-22#1 CAP'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.27	Replace Meadow Brook 138 kV breaker 'MD-4'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0347.28	Replace Meadow Brook 138 kV breaker 'MD-5'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.29	Replace Meadowbrook 138 kV breaker 'MD-6'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.30	Replace Meadowbrook 138 kV breaker 'MD-7'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</p>
b0347.31	Replace Meadowbrook 138 kV breaker 'MD-8'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</p>

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.32	Replace Meadowbrook 138 kV breaker 'MD-9'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</p>
b0347.33	Replace Meadow Brook 138kV breaker 'MD-1'	APS (100%)
b0347.34	Replace Meadow Brook 138kV breaker 'MD-2'	APS (100%)
b0348	Upgrade Stonewall – Inwood 138 kV with 954 ACSR conductor	APS (100%)
b0373	Convert Doubs – Monocacy 138 kV facilities to 230 kV operation	AEC (1.82%) / APS (76.84%) / DPL (2.64%) / JCPL (4.53%) / ME (9.15%) / Neptune* (0.42%) / PPL (4.60%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0393	Replace terminal equipment at Harrison 500 kV and Belmont 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> ATSI (33.81%) / Dayton (14.78%) / DEOK (44.45%) / EKPC (6.96%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0406.1	Replace Mitchell 138 kV breaker “#4 bank”	APS (100%)
b0406.2	Replace Mitchell 138 kV breaker “#5 bank”	APS (100%)
b0406.3	Replace Mitchell 138 kV breaker “#2 transf”	APS (100%)
b0406.4	Replace Mitchell 138 kV breaker “#3 bank”	APS (100%)
b0406.5	Replace Mitchell 138 kV breaker “Charlerio #2”	APS (100%)
b0406.6	Replace Mitchell 138 kV breaker “Charlerio #1”	APS (100%)
b0406.7	Replace Mitchell 138 kV breaker “Shepler Hill Jct”	APS (100%)
b0406.8	Replace Mitchell 138 kV breaker “Union Jct”	APS (100%)
b0406.9	Replace Mitchell 138 kV breaker “#1-2 138 kV bus tie”	APS (100%)
b0407.1	Replace Marlowe 138 kV breaker “#1 transf”	APS (100%)
b0407.2	Replace Marlowe 138 kV breaker “MBO”	APS (100%)
b0407.3	Replace Marlowe 138 kV breaker “BMA”	APS (100%)
b0407.4	Replace Marlowe 138 kV breaker “BMR”	APS (100%)
b0407.5	Replace Marlowe 138 kV breaker “WC-1”	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0407.6	Replace Marlowe 138 kV breaker “R11”	APS (100%)
b0407.7	Replace Marlowe 138 kV breaker “W”	APS (100%)
b0407.8	Replace Marlowe 138 kV breaker “138 kV bus tie”	APS (100%)
b0408.1	Replace Trissler 138 kV breaker “Belmont 604”	APS (100%)
b0408.2	Replace Trissler 138 kV breaker “Edgelawn 90”	APS (100%)
b0409.1	Replace Weirton 138 kV breaker “Wylie Ridge 210”	APS (100%)
b0409.2	Replace Weirton 138 kV breaker “Wylie Ridge 216”	APS (100%)
b0410	Replace Glen Falls 138 kV breaker “McAlpin 30”	APS (100%)
b0417	Reconductor Mitchell – Shepler Hill Junction 138kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0418	Install a breaker failure auto-restoration scheme at Cabot 500 kV for the failure of the #6 breaker	AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b0419	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (100%)
b0420	Operating Procedure to open the Black Oak 500/138 kV transformer #3 for the loss of Hatfield – Ronco 500 kV and the Hatfield #3 Generation	APS (100%)
b0445	Upgrade substation equipment and reconductor the Tidd – Mahans Lane – Weirton 138kV circuit with 954 ACSR	APS (100%)

\* Neptune Regional Transmission System, LLC

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0460	Raise limiting structures on Albright – Bethelboro 138 kV to raise the rating to 175 MVA normal 214 MVA emergency		APS (100%)
b0491	Construct an Amos to Welton Spring to WV state line 765 kV circuit (APS equipment)	As specified under the procedures detailed in Attachment H-19B	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPSCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPSCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492	Construct a Welton Spring to Kemptown 765 kV line (APS equipment)	As specified under the procedures detailed in Attachment H-19B
b0492.3	Replace Eastalco 230 kV breaker D-26	APS (100%)
b0492.4	Replace Eastalco 230 kV breaker D-28	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.5	Replace Eastalco 230 kV breaker D-31	APS (100%)
b0495	Replace existing Kammer 765/500 kV transformer with a new larger transformer	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (0.73%) / BGE (43.42%) / Dayton (0.67%) / DEOK (1.42%) / EKPC (0.22%) / PEPCO (53.54%)</p>
b0533	Reconductor the Powell Mountain – Sutton 138 kV line	APS (100%)
b0534	Install a 28.61 MVAR capacitor on Sutton 138 kV	APS (100%)
b0535	Install a 44 MVAR capacitor on Dutch Fork 138 kV	APS (100%)
b0536	Replace Doubs circuit breaker DJ1	APS (100%)
b0537	Replace Doubs circuit breaker DJ7	APS (100%)
b0538	Replace Doubs circuit breaker DJ10	APS (100%)
b0572.1	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0572.2	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)
b0573	Reconfigure circuits in Butler – Cabot 138 kV area	APS (100%)
b0577	Replace Fort Martin 500 kV breaker FL-1	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (100%)</p>
b0584	Install 33 MVAR 138 kV capacitor at Necessity 138 kV	APS (100%)
b0585	Increase Cecil 138 kV capacitor size to 44 MVAR, replace five 138 kV breakers at Cecil due to increased short circuit fault duty as a result of the addition of the Prexy substation	APS (100%)
b0586	Increase Whiteley 138 kV capacitor size to 44 MVAR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0587	Reconductor AP portion of Tidd – Carnegie 138 kV and Carnegie – Weirton 138 kV with 954 ACSR	APS (100%)
b0588	Install a 40.8 MVAR 138 kV capacitor at Grassy Falls	APS (100%)
b0589	Replace five 138 kV breakers at Cecil	APS (100%)
b0590	Replace #1 and #2 breakers at Charleroi 138 kV	APS (100%)
b0591	Install a 25.2 MVAR capacitor at Seneca Caverns 138 kV	APS (100%)
b0673	Rebuild Elko – Carbon Center Junction using 230 kV construction	APS (100%)
b0674	Construct new Osage – Whiteley 138 kV circuit	APS (97.68%) / DL (0.96%) / PENELEC (1.09%) / ECP** (0.01%) / PSEG (0.25%) / RE (0.01%)
b0674.1	Replace the Osage 138 kV breaker ‘CollinsF126’	APS (100%)
b0675.1	Convert Monocacy - Walkersville 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.2	Convert Walkersville - Catocin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.3	Convert Ringgold - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.4	Convert Catoctin - Carroll 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.5	Convert portion of Ringgold Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.6	Convert Catoctin Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.7	Convert portion of Carroll Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.8	Convert Monocacy Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.9	Convert Walkersville Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0676.1	Reconductor Doubs - Lime Kiln (#207) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0676.2	Reconductor Doubs - Lime Kiln (#231) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0677	Reconductor Double Toll Gate – Riverton with 954 ACSR	APS (100%)
b0678	Reconductor Glen Falls - Oak Mound 138kV with 954 ACSR	APS (100%)
b0679	Reconductor Grand Point – Letterkenny with 954 ACSR	APS (100%)
b0680	Reconductor Greene – Letterkenny with 954 ACSR	APS (100%)
b0681	Replace 600/5 CT's at Franklin 138 kV	APS (100%)
b0682	Replace 600/5 CT's at Whiteley 138 kV	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0684	Reconductor Guilford – South Chambersburg with 954 ACSR	APS (100%)
b0685	Replace Ringgold 230/138 kV #3 with larger transformer	APS (71.93%) / JCPL (4.17%) / ME (6.79%) / NEPTUNE* (0.38%) / PECO (4.05%) / PENELEC (5.88%) / ECP** (0.18%) / PSEG (6.37%) / RE (0.25%)
b0704	Install a third Cabot 500/138 kV transformer	APS (74.36%) / DL (2.73%) PENELEC (22.91%)
b0797	Advance n0321 (Replace Doubs Circuit Breaker DJ2)	APS(100%)
b0798	Advance n0322 (Replace Doubs Circuit Breaker DJ3)	APS(100%)
b0799	Advance n0323 (Replace Doubs Circuit Breaker DJ6)	APS(100%)
b0800	Advance n0327 (Replace Doubs Circuit Breaker DJ16)	APS(100%)
b0941	Replace Opequon 138 kV breaker 'BUSTIE'	APS(100%)
b0942	Replace Butler 138 kV breaker '#1 BANK'	APS(100%)
b0943	Replace Butler 138 kV breaker '#2 BANK'	APS(100%)
b0944	Replace Yukon 138 kV breaker 'Y-8'	APS(100%)
b0945	Replace Yukon 138 kV breaker 'Y-3'	APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0946	Replace Yukon 138 kV breaker 'Y-1'		APS(100%)
b0947	Replace Yukon 138 kV breaker 'Y-5'		APS(100%)
b0948	Replace Yukon 138 kV breaker 'Y-2'		APS(100%)
b0949	Replace Yukon 138 kV breaker 'Y-19'		APS(100%)
b0950	Replace Yukon 138 kV breaker 'Y-4'		APS(100%)
b0951	Replace Yukon 138 kV breaker 'Y-9'		APS(100%)
b0952	Replace Yukon 138 kV breaker 'Y-11'		APS(100%)
b0953	Replace Yukon 138 kV breaker 'Y-13'		APS(100%)
b0954	Replace Charleroi 138 kV breaker '#1 XFMR BANK'		APS(100%)
b0955	Replace Yukon 138 kV breaker 'Y-7'		APS(100%)
b0956	Replace Pruntytown 138 kV breaker 'P-9'		APS(100%)
b0957	Replace Pruntytown 138 kV breaker 'P-12'		APS(100%)
b0958	Replace Pruntytown 138 kV breaker 'P-15'		APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0959 Replace Charleroi 138 kV breaker '#2 XFMR BANK'		APS(100%)
b0960 Replace Pruntytown 138 kV breaker 'P-2'		APS(100%)
b0961 Replace Pruntytown 138 kV breaker 'P-5'		APS(100%)
b0962 Replace Yukon 138 kV breaker 'Y-18'		APS(100%)
b0963 Replace Yukon 138 kV breaker 'Y-10'		APS(100%)
b0964 Replace Pruntytown 138 kV breaker 'P-11'		APS(100%)
b0965 Replace Springdale 138 kV breaker '138E'		APS(100%)
b0966 Replace Pruntytown 138 kV breaker 'P-8'		APS(100%)
b0967 Replace Pruntytown 138 kV breaker 'P-14'		APS(100%)
b0968 Replace Ringgold 138 kV breaker '#3 XFMR BANK'		APS(100%)
b0969 Replace Springdale 138 kV breaker '138C'		APS(100%)
b0970 Replace Rivesville 138 kV breaker '#8 XFMR BANK'		APS(100%)
b0971 Replace Springdale 138 kV breaker '138F'		APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0972	Replace Belmont 138 kV breaker 'B-16'		APS(100%)
b0973	Replace Springdale 138 kV breaker '138G'		APS(100%)
b0974	Replace Springdale 138 kV breaker '138V'		APS(100%)
b0975	Replace Armstrong 138 kV breaker 'BROOKVILLE'		APS(100%)
b0976	Replace Springdale 138 kV breaker '138P'		APS(100%)
b0977	Replace Belmont 138 kV breaker 'B-17'		APS(100%)
b0978	Replace Springdale 138 kV breaker '138U'		APS(100%)
b0979	Replace Springdale 138 kV breaker '138D'		APS(100%)
b0980	Replace Springdale 138 kV breaker '138R'		APS(100%)
b0981	Replace Yukon 138 kV breaker 'Y-12'		APS(100%)
b0982	Replace Yukon 138 kV breaker 'Y-17'		APS(100%)
b0983	Replace Yukon 138 kV breaker 'Y-14'		APS(100%)
b0984	Replace Rivesville 138 kV breaker '#10 XFMR BANK'		APS(100%)
b0985	Replace Belmont 138 kV breaker 'B-14'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0986	Replace Armstrong 138 kV breaker 'RESERVE BUS'		APS(100%)
b0987	Replace Yukon 138 kV breaker 'Y-16'		APS(100%)
b0988	Replace Springdale 138 kV breaker '138T'		APS(100%)
b0989	Replace Edgelawn 138 kV breaker 'GOFF RUN #632'		APS(100%)
b0990	Change reclosing on Cabot 138 kV breaker 'C-9'		APS(100%)
b0991	Change reclosing on Belmont 138 kV breaker 'B-7'		APS(100%)
b0992	Change reclosing on Belmont 138 kV breaker 'B-12'		APS(100%)
b0993	Change reclosing on Belmont 138 kV breaker 'B-9'		APS(100%)
b0994	Change reclosing on Belmont 138 kV breaker 'B-19'		APS(100%)
b0995	Change reclosing on Belmont 138 kV breaker 'B-21'		APS(100%)
b0996	Change reclosing on Willow Island 138 kV breaker 'FAIRVIEW #84'		APS(100%)
b0997	Change reclosing on Cabot 138 kV breaker 'C-4'		APS(100%)
b0998	Change reclosing on Cabot 138 kV breaker 'C-1'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0999	Replace Redbud 138 kV breaker 'BUS TIE'		APS(100%)
b1022.1	Reconfigure the Peters to Bethel Park 138 kV line and Elrama to Woodville 138 kV line to create a 138 kV path from Woodville to Peters and a 138 kV path from Elrama to Bethel Park		APS (96.98%) / DL (3.02%)
b1022.3	Add static capacitors at Smith 138 kV		APS (96.98%) / DL (3.02%)
b1022.4	Add static capacitors at North Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.5	Add static capacitors at South Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.6	Add static capacitors at Manifold 138 kV		APS (96.98%) / DL (3.02%)
b1022.7	Add static capacitors at Houston 138 kV		APS (96.98%) / DL (3.02%)
b1023.1	Install a 500/138 kV transformer at 502 Junction		APS (100%)
b1023.2	Construct a new Franklin - 502 Junction 138 kV line including a rebuild of the Whiteley - Franklin 138 kV line to double circuit		APS (100%)
b1023.3	Construct a new 502 Junction - Osage 138 kV line		APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1023.4	Construct Braddock 138 kV breaker station that connects the Charleroi - Gordon 138 kV line, Washington - Franklin 138 kV line and the Washington - Vanceville 138 kV line including a 66 MVAR capacitor	APS (100%)
b1027	Increase the size of the shunt capacitors at Enon 138 kV	APS (100%)
b1028	Raise three structures on the Osage - Collins Ferry 138 kV line to increase the line rating	APS (100%)
b1128	Reconductor the Edgewater – Vasco Tap; Edgewater – Loyalhanna 138 kV lines with 954 ACSR	APS (100%)
b1129	Reconductor the East Waynesboro – Ringgold 138 kV line with 954 ACSR	APS (100%)
b1131	Upgrade Double Tollgate – Meadowbrook MDT Terminal Equipment	APS (100%)
b1132	Upgrade Double Tollgate-Meadowbrook MBG terminal equipment	APS (100%)
b1133	Upgrade terminal equipment at Springdale	APS (100%)
b1135	Reconductor the Bartonville – Meadowbrook 138 kV line with high temperature conductor	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1137	Reconductor the Eastgate – Luxor 138 kV; Eastgate – Sony 138 kV line with 954 ACSR	APS (78.59%) / PENELEC (14.08%) / ECP ** (0.23%) / PSEG (6.83%) / RE (0.27%)
b1138	Reconductor the King Farm – Sony 138 kV line with 954 ACSR	APS (100%)
b1139	Reconductor the Yukon – Waltz Mills 138 kV line with high temperature conductor	APS (100%)
b1140	Reconductor the Bracken Junction – Luxor 138 kV line with 954 ACSR	APS (100%)
b1141	Reconductor the Sewickley – Waltz Mills Tap 138 kV line with high temperature conductor	APS (100%)
b1142	Reconductor the Bartonsville – Stephenson 138 kV; Stonewall – Stephenson 138 kV line with 954 ACSR	APS (100%)
b1143	Reconductor the Youngwood – Yukon 138 kV line with high temperature conductor	APS (89.92%) / PENELEC (10.08%)
b1144	Reconductor the Bull Creek Junction – Cabot 138 kV line with high temperature conductor	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1145 Reconnector the Lawson Junction – Cabot 138 kV line with high temperature conductor		APS (100%)
b1146 Replace Layton - Smithton #61 138 kV line structures to increase line rating		APS (100%)
b1147 Replace Smith – Yukon 138 kV line structures to increase line rating		APS (100%)
b1148 Reconnector the Loyalhanna – Luxor 138 kV line with 954 ACSR		APS (100%)
b1149 Reconnector the Luxor – Stony Springs Junction 138 kV line with 954 ACSR		APS (100%)
b1150 Upgrade terminal equipment at Social Hall		APS (100%)
b1151 Reconnector the Greenwood – Redbud 138 kV line with 954 ACSR		APS (100%)
b1152 Reconnector Grand Point – South Chambersburg		APS (100%)
b1159 Replace Peters 138 kV breaker ‘Bethel P OCB’		APS (100%)
b1160 Replace Peters 138 kV breaker ‘Cecil OCB’		APS (100%)
b1161 Replace Peters 138 kV breaker ‘Union JctOCB’		APS (100%)
b1162 Replace Double Toll Gate 138 kV breaker ‘DRB-2’		APS (100%)
b1163 Replace Double Toll Gate 138 kV breaker ‘DT 138 kV OCB’		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1164	Replace Cecil 138 kV breaker 'Enlow OCB'		APS (100%)
b1165	Replace Cecil 138 kV breaker 'South Fayette'		APS (100%)
b1166	Replace Wylie Ridge 138 kV breaker 'W-9'		APS (100%)
b1167	Replace Reid 138 kV breaker 'RI-2'		APS (100%)
b1171.1	Install the second Black Oak 500/138 kV transformer, two 138 kV breaker, and related substation work		BGE (20.76%) / DPL (3.14%) / Dominion (39.55%) / ME (2.71%) / PECO (3.36%) / PEPCO (30.48%)
b1171.3	Install six 500 kV breakers and remove BOL1 500 kV breaker at Black Oak		AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
b1200	Reconductor Double Toll Gate – Greenwood 138 kV with 954 ACSR conductor		APS (100%)
b1221.1	Convert Carbon Center from 138 kV to a 230 kV ring bus		APS (100%)
b1221.2	Construct Bear Run 230 kV substation with 230/138 kV transformer		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1221.3	Loop Carbon Center Junction – Williamette line into Bear Run	APS (100%)
b1221.4	Carbon Center – Carbon Center Junction & Carbon Center Junction – Bear Run conversion from 138 kV to 230 kV	APS (100%)
b1230	Reconductor Willow-Eureka & Eureka-St Mary 138 kV lines	APS (100%)
b1232	Reconductor Nipetown – Reid 138 kV with 1033 ACCR	AEC (1.40%) / APS (75.74%) / DPL (1.92%) / JCPL (2.92%) / ME (6.10%) / Neptune (0.27%) / PECO (4.40%) / PENELEC (3.26%) / PPL (3.99%)
b1233.1	Upgrade terminal equipment at Washington	APS (100%)
b1234	Replace structures between Ridgeway and Paper city	APS (100%)
b1235	Reconductor the Albright – Black Oak AFA 138 kV line with 795 ACSS/TW	APS (30.25%) / BGE (16.10%) / Dominion (30.51%) / PEPCO (23.14%)
b1237	Upgrade terminal equipment at Albright, replace bus and line side breaker disconnects and leads, replace breaker risers, upgrade RTU and line	APS (100%)
b1238	Install a 138 kV 44 MVAR capacitor at Edgelawn substation	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1239	Install a 138 kV 44 MVAR capacitor at Ridgeway substation	APS (100%)
b1240	Install a 138 kV 44 MVAR capacitor at Elko Substation	APS (100%)
b1241	Upgrade terminal equipment at Washington substation on the GE Plastics/DuPont terminal	APS (100%)
b1242	Replace structures between Collins Ferry and West Run	APS (100%)
b1243	Install a 138 kV capacitor at Potter Substation	APS (100%)
b1261	Replace Butler 138 kV breaker '1-2 BUS 138'	APS (100%)
b1383	Install 2nd 500/138 kV transformer at 502 Junction	APS (93.27%) / DL (5.39%) / PENELEC (1.34%)
b1384	Reconductor approximately 2.17 miles of Bedington – Shepherdstown 138 kV with 954 ACSR	APS (100%)
b1385	Reconductor Halfway – Paramount 138 kV with 1033 ACCR	APS (100%)
b1386	Reconductor Double Tollgate – Meadow Brook 138 kV ckt 2 with 1033 ACCR	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1387	Reconductor Double Tollgate – Meadow Brook 138 kV	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1388	Reconductor Feagans Mill – Millville 138 kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1389	Reconductor Bens Run – St. Mary’s 138 kV with 954 ACSR		AEP (12.40%) / APS (17.80%) / DL (69.80%)
b1390	Replace Bus Tie Breaker at Opequon		APS (100%)
b1391	Replace Line Trap at Gore		APS (100%)
b1392	Replace structure on Belmont – Trissler 138 kV line		APS (100%)
b1393	Replace structures Kingwood – Pruntytown 138 kV line		APS (100%)
b1395	Upgrade Terminal Equipment at Kittanning		APS (100%)
b1401	Change reclosing on Pruntytown 138 kV breaker ‘P-16’ to 1 shot at 15 seconds		APS (100%)
b1402	Change reclosing on Rivesville 138 kV breaker ‘Pruntytown #34’ to 1 shot at 15 seconds		APS (100%)
b1403	Change reclosing on Yukon 138 kV breaker ‘Y21 Shepler’ to 1 shot at 15 seconds		APS (100%)
b1404	Replace the Kiski Valley 138 kV breaker ‘Vandergrift’ with a 40 kA breaker		APS (100%)
b1405	Change reclosing on Armstrong 138 kV breaker ‘GARETTRJCT’ at 1 shot at 15 seconds		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1406	Change reclosing on Armstrong 138 kV breaker 'KITTANNING' to 1 shot at 15 seconds		APS (100%)
b1407	Change reclosing on Armstrong 138 kV breaker 'BURMA' to 1 shot at 15 seconds		APS (100%)
b1408	Replace the Weirton 138 kV breaker 'Tidd 224' with a 40 kA breaker		APS (100%)
b1409	Replace the Cabot 138 kV breaker 'C9 Kiski Valley' with a 40 kA breaker		APS (100%)
b1507.2	Terminal Equipment upgrade at Doubs substation		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1507.3	Mt. Storm – Doubs transmission line rebuild in Maryland – Total line mileage for APS is 2.71 miles	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)  <b>DFAX Allocation:</b> APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)
b1510	Install 59.4 MVAR capacitor at Waverly	APS (100%)
b1672	Install a 230 kV breaker at Carbon Center	APS (100%)
b0539	Replace Doubs circuit breaker DJ11	APS (100%)
b0540	Replace Doubs circuit breaker DJ12	APS (100%)
b0541	Replace Doubs circuit breaker DJ13	APS (100%)
b0542	Replace Doubs circuit breaker DJ20	APS (100%)
b0543	Replace Doubs circuit breaker DJ21	APS (100%)
b0544	Remove instantaneous reclose from Eastalco circuit breaker D-26	APS (100%)
b0545	Remove instantaneous reclose from Eastalco circuit breaker D-28	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0559	Install 200 MVAR capacitor at Meadow Brook 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</p>
b0560	Install 250 MVAR capacitor at Kemptown 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1803	Build a 300 MVAR Switched Shunt at Doubs 500 kV and increase (~50 MVAR) in size the existing Switched Shunt at Doubs 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)</p>
b1804	Install a new 600 MVAR SVC at Meadowbrook 500kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)</p>
b1816.1	Replace relaying at the Mt. Airy substation on the Carroll - Mt. Airy 230 kV line	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1816.2	Adjust the control settings of all existing capacitors at Mt Airy 34.5kV, Monocacy 138kV, Ringgold 138kV served by Potomac Edison's Eastern 230 kV network to ensure that all units will be on during the identified N-1-1 contingencies		APS (100%)
b1816.3	Replace existing unidirectional LTC controller on the No. 4, 230/138 kV transformer at Carroll substation with a bidirectional unit		APS (100%)
b1816.4	Isolate and bypass the 138 kV reactor at Germantown Substation		APS (100%)
b1816.6	Replace 336.4 ACSR conductor on the Catocin - Carroll 138 kV line using 556.5 ACSR (26/7) or equivalent on existing structures (12.7 miles), 800 A wave traps at Carroll and Catocin with 1200 A units, and 556.5 ACSR SCCIR (Sub-conductor) line risers and bus traps with 795 ACSR or equivalent		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1822	Replace the 1200 A wave trap, line risers, breaker risers with 1600 A capacity terminal equipment at Reid 138 kV SS	APS (100%)
b1823	Replace the 800 A wave trap with a 1200 A wave trap at Millville 138 kV substation	APS (100%)
b1824	Reconductor Grant Point - Guilford 138kV line approximately 8 miles of 556 ACSR with 795 ACSR	APS (100%)
b1825	Replace the 800 Amp line trap at Butler 138 kV Sub on the Cabot East 138 kV line	APS (100%)
b1826	Change the CT ratio at Double Toll Gate 138 kV SS on MDT line	APS (100%)
b1827	Change the CT ratio at Double Toll Gate 138 kV SS on MBG line	APS (100%)
b1828.1	Reconductor the Bartonville – Stephenson 3.03 mile 138 kV line of 556 ACSR with 795 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1828.2	Reconductor the Stonewall – Stephenson 2.08 mile 138 kV line of 556 ACSR with 795 ACSR		APS (100%)
b1829	Replace the existing 138 kV 556.5 ACSR substation conductor risers with 954 ACSR at the Redbud 138 kV substation, including but not limited to the line side disconnect leads		APS (100%)
b1830	Replace 1200 A wave trap and 1024 ACAR breaker risers at Halfway 138 kV substation, and replace 1024 ACAR breaker risers at Paramount 138 kV substation		APS (100%)
b1832	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 1 (207) 230 kV line terminal		APS (100%)
b1833	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 2 (231) 230 kV line terminal		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1835	Reconductor 14.3 miles of 556 ACSR with 795 ACSR from Old Chapel to Millville 138 kV and upgrade line risers at Old Chapel 138 kV and Millville 138 kV and replace 1200 A wave trap at Millville 138 kV		APS (37.68%) / Dominion (34.46%) / PEPCO (13.69%) / BGE (11.45%) / ME (2.01%) / PENELEC (0.53%) / DL (0.18%)
b1836	Replace 1200 A wave trap with 1600 A wave trap at Reid 138 kV SS		APS (100%)
b1837	Replace 750 CU breaker risers with 795 ACSR at Marlowe 138 kV and replace 1200 A wave traps with 1600 A wave traps at Marlowe 138 kV and Bedington 138 kV		APS (100%)
b1838	Replace the 1200 A Bedington 138 kV line air switch and the 1200 A 138 kV bus tie air switch at Nipetown 138 kV with 1600 A switches		APS (100%)
b1839	Install additional 33 MVAR capacitors at Grand Point 138 kV SS and Guildford 138 kV SS		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1840	Construct a 138 kV line between Buckhannon and Weston 138 kV substations	APS (100%)
b1902	Replace line trap at Stonewall on the Stephenson 138 kV line terminal	APS (100%)
b1941	Loop the Homer City-Handsome Lake 345 kV line into the Armstrong substation and install a 345/138 kV transformer at Armstrong	APS (67.86%) / PENELEC (32.14%)
b1942	Change the CT ratio at Millville to improve the Millville – Old Chapel 138 kV line ratings	APS (100%)
b1964	Convert Moshannon substation to a 4 breaker 230 kV ring bus	APS (41.06%) / DPL (6.68%) / JCPL (5.48%) / ME (10.70%) / Neptune* (0.53%) / PECO (15.53%) / PPL (20.02%)
b1965	Install a 44 MVAR 138 kV capacitor at Luxor substation	APS (100%)
b1986	Upgrade the AP portion of the Elrama – Mitchell 138 kV line by replace breaker risers on the Mitchell 138 kV bus on the Elrama terminal	APS (100%)
b1987	Reconductor the Osage-Collins Ferry 138 kV line with 795 ACSS. Upgrade terminal equipment at Osage and Collins Ferry	APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1988	Raise structures between Lake Lynn and West Run to eliminate the clearance de-rates on the West Run – Lake Lynn 138 kV line	APS (100%)
b1989	Raise structures between Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line	APS (100%)
b2095	Replace Weirt 138 kV breaker 'S-TORONTO226' with 63kA rated breaker	APS (100%)
b2096	Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'	APS (100%)
b2097	Replace Ridgeley 138 kV breaker '#2 XFMR OCB'	APS (100%)
b2098	Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker	APS (100%)
b2099	Revise the reclosing of Ridgeley 138 kV breaker 'RC1'	APS (100%)
b2100	Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker	APS (100%)
b2101	Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker	APS (100%)
b2102	Replace Armstrong 138 kV breaker 'GARETTRJCT' with 40kA rated breaker	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2103	Replace Armstrong 138 kV breaker 'BURMA' with 40kA rated breaker		APS (100%)
b2104	Replace Armstrong 138 kV breaker 'KITANNING' with 40kA rated breaker		APS (100%)
b2105	Replace Armstrong 138 kV breaker 'KISSINGERJCT' with 40kA rated breaker		APS (100%)
b2106	Replace Wylie Ridge 345 kV breaker 'WK-1' with 63kA rated breaker		APS (100%)
b2107	Replace Wylie Ridge 345 kV breaker 'WK-2' with 63kA rated breaker		APS (100%)
b2108	Replace Wylie Ridge 345 kV breaker 'WK-3' with 63kA rated breaker		APS (100%)
b2109	Replace Wylie Ridge 345 kV breaker 'WK-4' with 63kA rated breaker		APS (100%)
b2110	Replace Wylie Ridge 345 kV breaker 'WK-6' with 63kA rated breaker		APS (100%)
b2111	Replace Wylie Ridge 138 kV breaker 'WK-7' with 63kA rated breaker		APS (100%)
b2112	Replace Wylie Ridge 345 kV breaker 'WK-5'		APS (100%)
b2113	Replace Weirton 138 kV breaker 'NO 6 XFMR' with 63kA rated breaker		APS (100%)
b2114	Replace Armstrong 138 kV breaker 'Bus-Tie' (Status On-Hold pending retirement)		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2124.1	Add a new 138 kV line exit		APS (100%)
b2124.2	Construct a 138 kV ring bus and install a 138/69 kV autotransformer		APS (100%)
b2124.3	Add new 138 kV line exit and install a 138/25 kV transformer		APS (100%)
b2124.4	Construct approximately 5.5 miles of 138 kV line		APS (100%)
b2124.5	Convert approximately 7.5 miles of 69 kV to 138 kV		APS (100%)
b2156	Install a 75 MVAR 230 kV capacitor at Shingletown Substation		APS (100%)
b2165	Replace 800A wave trap at Stonewall with a 1200 A wave trap		APS (100%)
b2166	Reconductor the Millville – Sleepy Hollow 138kV 4.25 miles of 556 ACSR with 795 ACSR, upgrade line risers at Sleepy Hollow, and change 1200 A CT tap at Millville to 800		APS (100%)
b2168	For Grassy Falls 138kV Capacitor bank adjust turn-on voltage to 1.0pu with a high limit of 1.04pu, For Crupperneck and Powell Mountain 138kV Capacitor Banks adjust turn-on voltage to 1.01pu with a high limit of 1.035pu		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2169	Replace/Raise structures on the Yukon-Smithton 138 kV line section to eliminate clearance de-rate	APS (100%)
b2170	Replace/Raise structures on the Smithton-Shepler Hill Jct 138 kV line section to eliminate clearance de-rate	APS (100%)
b2171	Replace/Raise structures on the Parsons-William 138 kV line section to eliminate clearance de-rate	APS (100%)
b2172	Replace/Raise structures on the Parsons - Loughs Lane 138 kV line section to eliminate clearance de-rate	APS (100%)

## SCHEDULE 12 – APPENDIX

- (17) **AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0318	Install a 765/138 kV transformer at Amos		AEP (99.00%) / PEPCO (1.00%)
b0324	Replace entrance conductors, wave traps, and risers at the Tidd 345 kV station on the Tidd – Canton Central 345 kV circuit		AEP (100%)
b0447	Replace Cook 345 kV breaker M2		AEP (100%)
b0448	Replace Cook 345 kV breaker N2		AEP (100%)
b0490	Construct an Amos – Bedington 765 kV circuit (AEP equipment)	As specified under the procedures detailed in Attachment H-19B	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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\*\* East Coast Power, L.L.C.

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.2	Replace Amos 138 kV breaker 'B'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.3	Replace Amos 138 kV breaker 'B1'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)</p>

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.4	Replace Amos 138 kV breaker 'C'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0490.5	Replace Amos 138 kV breaker 'C1'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.6	Replace Amos 138 kV breaker 'D'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0490.7	Replace Amos 138 kV breaker 'D2'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.8	Replace Amos 138 kV breaker 'E'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0490.9	Replace Amos 138 kV breaker 'E2'	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0504	Add two advanced technology circuit breakers at Hanging Rock 765 kV to improve operational performance	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEP (100%)</p>
b0570	Reconductor East Side Lima – Sterling 138 kV	AEP (41.99%) / ComEd (58.01%)
b0571	Reconductor West Millersport – Millersport 138 kV	AEP (73.83%) / ComEd (19.26%) / Dayton (6.91%)
b0748	Establish a new 69 kV circuit between the Canal Road and East Wooster stations, establish a new 69 kV circuit between the West Millersburg and Moreland Switch stations (via Shreve), add reactive support via cap banks	AEP (100%)
b0838	Hazard Area 138 kV and 69 kV Improvement Projects	AEP (100%)
b0839	Replace existing 450 MVA transformer at Twin Branch 345 / 138 kV with a 675 MVA transformer	AEP (99.73%) / Dayton (0.27%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0840	String a second 138 kV circuit on the open tower position between Twin Branch and East Elkhart	AEP (100%)
b0840.1	Establish a new 138/69-34.5kV Station to interconnect the existing 34.5kV network	AEP (100%)
b0917	Replace Baileysville 138 kV breaker 'P'	AEP (100%)
b0918	Replace Riverview 138 kV breaker '634'	AEP (100%)
b0919	Replace Torrey 138 kV breaker 'W'	AEP (100%)
b1032.1	Construct a new 345/138kV station on the Marquis-Bixby 345kV line near the intersection with Ross - Highland 69kV	AEP (89.97%) / Dayton (10.03%)
b1032.2	Construct two 138kV outlets to Delano 138kV station and to Camp Sherman station	AEP (89.97%) / Dayton (10.03%)
b1032.3	Convert Ross - Circleville 69kV to 138kV	AEP (89.97%) / Dayton (10.03%)
b1032.4	Install 138/69kV transformer at new station and connect in the Ross - Highland 69kV line	AEP (89.97%) / Dayton (10.03%)
b1033	Add a third delivery point from AEP's East Danville Station to the City of Danville.	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.1	Establish new South Canton - West Canton 138kV line (replacing Torrey - West Canton) and Wagenhals - Wayview 138kV	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.2	Loop the existing South Canton - Wayview 138kV circuit in-and-out of West Canton	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.3	Install a 345/138kV 450 MVA transformer at Canton Central	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.4	Rebuild/reconductor the Sunnyside - Torrey 138kV line	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.5	Disconnect/eliminate the West Canton 138kV terminal at Torrey Station	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.6	Replace all 138kV circuit breakers at South Canton Station and operate the station in a breaker and a half configuration	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.7	Replace all obsolete 138kV circuit breakers at the Torrey and Wagenhals stations	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.8	Install additional 138kV circuit breakers at the West Canton, South Canton, Canton Central, and Wagenhals stations to accommodate the new circuits	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1035	Establish a third 345kV breaker string in the West Millersport Station. Construct a new West Millersport – Gahanna 138kV circuit. Miscellaneous improvements to 138kV transmission system.	AEP (100%)
b1036	Upgrade terminal equipment at Poston Station and update remote end relays	AEP (100%)
b1037	Sag check Bonsack–Cloverdale 138 kV, Cloverdale–Centerville 138kV, Centerville–Ivy Hill 138kV, Ivy Hill–Reusens 138kV, Bonsack–Reusens 138kV and Reusens–Monel–Gomingo–Joshua Falls 138 kV.	AEP (100%)
b1038	Check the Crooksville - Muskingum 138 kV sag and perform the required work to improve the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1039	Perform a sag study for the Madison – Cross Street 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1040	Rebuild an 0.065 mile section of the New Carlisle – Olive 138 kV line and change the 138 kV line switches at New Carlisle	AEP (100%)
b1041	Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating	AEP (100%)
b1042	Perform sag studies to raise the emergency rating of Amos – Poca 138kV	AEP (100%)
b1043	Perform sag studies to raise the emergency rating of Turner - Ruth 138kV	AEP (100%)
b1044	Perform sag studies to raise the emergency rating of Kenova – South Point 138kV	AEP (100%)
b1045	Perform sag studies of Tri State - Darrah 138 kV	AEP (100%)
b1046	Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating	AEP (100%)
b1047	Perform sag study of Otter Switch - Altavista 138kV to raise the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1048	Reconductor the Bixby - Three C - Groves and Bixby - Groves 138 kV tower line	AEP (100%)
b1049	Upgrade the risers at the Riverside station to increase the rating of Benton Harbor – Riverside 138kV	AEP (100%)
b1050	Rebuilding and reconductor the Bixby – Pickerington Road - West Lancaster 138 kV line	AEP (100%)
b1051	Perform a sag study for the Kenzie Creek – Pokagon 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1052	Unsix-wire the existing Hyatt - Sawmill 138 kV line to form two Hyatt - Sawmill 138 kV circuits	AEP (100%)
b1053	Perform a sag study and remediation of 32 miles between Claytor and Matt Funk.	AEP (100%)
b1091	Add 28.8 MVAR 138 kV capacitor bank at Huffman and 43.2 MVAR 138 kV Bank at Jubal Early and 52.8 MVAR 138 kV Bank at Progress Park Stations	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1092	Add 28.8 MVAR 138 kV capacitor bank at Sullivan Gardens and 52.8 MVAR 138 kV Bank at Reedy Creek Stations	AEP (100%)
b1093	Add a 43.2 MVAR capacitor bank at the Morgan Fork 138 kV Station	AEP (100%)
b1094	Add a 64.8 MVAR capacitor bank at the West Huntington 138 kV Station	AEP (100%)
b1108	Replace Ohio Central 138 kV breaker 'C2'	AEP (100%)
b1109	Replace Ohio Central 138 kV breaker 'D1'	AEP (100%)
b1110	Replace Sporn A 138 kV breaker 'J'	AEP (100%)
b1111	Replace Sporn A 138 kV breaker 'J2'	AEP (100%)
b1112	Replace Sporn A 138 kV breaker 'L'	AEP (100%)
b1113	Replace Sporn A 138 kV breaker 'L1'	AEP (100%)
b1114	Replace Sporn A 138 kV breaker 'L2'	AEP (100%)
b1115	Replace Sporn A 138 kV breaker 'N'	AEP (100%)
b1116	Replace Sporn A 138 kV breaker 'N2'	AEP (100%)
b1227	Perform a sag study on Altavista – Leesville 138 kV circuit	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1231	Replace the existing 138/69-12 kV transformer at West Moulton Station with a 138/69 kV transformer and a 69/12 kV transformer	AEP (96.69%) / Dayton (3.31%)
b1375	Replace Roanoke 138 kV breaker 'T'	AEP (100%)
b1376	Replace Roanoke 138 kV breaker 'E'	AEP (100%)
b1377	Replace Roanoke 138 kV breaker 'F'	AEP (100%)
b1378	Replace Roanoke 138 kV breaker 'G'	AEP (100%)
b1379	Replace Roanoke 138 kV breaker 'B'	AEP (100%)
b1380	Replace Roanoke 138 kV breaker 'A'	AEP (100%)
b1381	Replace Olive 345 kV breaker 'E'	AEP (100%)
b1382	Replace Olive 345 kV breaker 'R2'	AEP (100%)
b1416	Perform a sag study on the Desoto – Deer Creek 138 kV line to increase the emergency rating	AEP (100%)
b1417	Perform a sag study on the Delaware – Madison 138 kV line to increase the emergency rating	AEP (100%)
b1418	Perform a sag study on the Rockhill – East Lima 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1419	Perform a sag study on the Findlay Center – Fostoria Ctl 138 kV line to increase the emergency rating	AEP (100%)
b1420	A sag study will be required to increase the emergency rating for this line. Depending on the outcome of this study, more action may be required in order to increase the rating	AEP (100%)
b1421	Perform a sag study on the Sorenson – McKinley 138 kV line to increase the emergency rating	AEP (100%)
b1422	Perform a sag study on John Amos – St. Albans 138 kV line to allow for operation up to its conductor emergency rating	AEP (100%)
b1423	A sag study will be performed on the Chemical – Capitol Hill 138 kV line to determine if the emergency rating can be utilized	AEP (100%)
b1424	Perform a sag study for Benton Harbor – West Street – Hartford 138 kV line to improve the emergency rating	AEP (100%)
b1425	Perform a sag study for the East Monument – East Danville 138 kV line to allow for operation up to the conductor's maximum operating temperature	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1426	Perform a sag study for the Reusens – Graves 138 kV line to allow for operation up to the conductor’s maximum operating temperature	AEP (100%)
b1427	Perform a sag study on Smith Mountain – Leesville – Altavista – Otter 138 kV and on Boones – Forest – New London – JohnsMT – Otter	AEP (100%)
b1428	Perform a sag study on Smith Mountain – Candler’s Mountain 138 kV and Joshua Falls – Cloverdale 765 kV to allow for operation up to	AEP (100%)
b1429	Perform a sag study on Fremont – Clinch River 138 kV to allow for operation up to its conductor emergency ratings	AEP (100%)
b1430	Install a new 138 kV circuit breaker at Benton Harbor station and move the load from Watervliet 34.5 kV station to West street 138 kV	AEP (100%)
b1432	Perform a sag study on the Kenova – Tri State 138 kV line to allow for operation up to their conductor emergency rating	AEP (100%)
b1433	Replace risers in the West Huntington Station to increase the line ratings which would eliminate the overloads for the contingencies listed	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1434 Perform a sag study on the line from Desoto to Madison. Replace bus and risers at Daleville station and replace bus and risers at Madison		AEP (100%)
b1435 Replace the 2870 MCM ACSR riser at the Sporn station		AEP (100%)
b1436 Perform a sag study on the Sorenson – Illinois Road 138 kV line to increase the emergency MOT for this line. Replace bus and risers at Illinois Road		AEP (100%)
b1437 Perform sag study on Rock Cr. – Hummel Cr. 138 kV to increase the emergency MOT for the line, replace bus and risers at Huntington J., and replace relays for Hummel Cr. – Hunt – Soren. Line at Soren		AEP (100%)
b1438 Replacement of risers at McKinley and Industrial Park stations and performance of a sag study for the 4.53 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA		AEP (100%)
b1439 By replacing the risers at Lincoln both the Summer Normal and Summer Emergency ratings will improve to 268 MVA		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1440	By replacing the breakers at Lincoln the Summer Emergency rating will improve to 251 MVA	AEP (100%)
b1441	Replacement of risers at South Side and performance of a sag study for the 1.91 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1442	Replacement of 954 ACSR conductor with 1033 ACSR and performance of a sag study for the 4.54 miles of 2-636 ACSR section is expected	AEP (100%)
b1443	Station work at Thelma and Busseyville Stations will be performed to replace bus and risers	AEP (100%)
b1444	Perform electrical clearance studies on Clinch River – Clinchfield 139 kV line (a.k.a. sag studies) to determine if the emergency ratings can be utilized	AEP (100%)
b1445	Perform a sag study on the Addison (Buckeye CO-OP) – Thinever and North Crown City – Thivener 138 kV sag study and switch	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1446	Perform a sag study on the Parkersburg (Allegheny Power) – Belpre (AEP) 138 kV	AEP (100%)
b1447	Dexter – Elliot tap 138 kV sag check	AEP (100%)
b1448	Dexter – Meigs 138 kV Electrical Clearance Study	AEP (100%)
b1449	Meigs tap – Rutland 138 kV sag check	AEP (100%)
b1450	Muskingum – North Muskingum 138 kV sag check	AEP (100%)
b1451	North Newark – Sharp Road 138 kV sag check	AEP (100%)
b1452	North Zanesville – Zanesville 138 kV sag check	AEP (100%)
b1453	North Zanesville – Powelson and Ohio Central – Powelson 138 kV sag check	AEP (100%)
b1454	Perform an electrical clearance study on the Ross – Delano – Scioto Trail 138 kV line to determine if the emergency rating can be utilized	AEP (100%)
b1455	Perform a sag check on the Sunny – Canton Central – Wagenhals 138 kV line to determine if all circuits can be operated at their summer emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1456	The Tidd – West Bellaire 345 kV circuit has been de-rated to its normal rating and would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)
b1457	The Tiltonsville – Windsor 138 kV circuit has been derated to its normal rating and would need an electrical clearance study to determine if the emergency rating could be utilized	AEP (100%)
b1458	Install three new 345 kV breakers at Bixby to separate the Marquis 345 kV line and transformer #2. Operate Circleville – Harrison 138 kV and Harrison – Zuber 138 kV up to conductor emergency ratings	AEP (100%)
b1459	Several circuits have been de-rated to their normal conductor ratings and could benefit from electrical clearance studies to determine if the emergency rating could be utilized	AEP (100%)
b1460	Replace 2156 & 2874 risers	AEP (100%)
b1461	Replace meter, metering CTs and associated equipment at the Paden City feeder	AEP (100%)
b1462	Replace relays at both South Cadiz 138 kV and Tidd 138 kV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1463	Reconductor the Bexley – Groves 138 kV circuit	AEP (100%)
b1464	Corner 138 kV upgrades	AEP (100%)
b1465.1	Add a 3rd 2250 MVA 765/345 kV transformer at Sullivan station	AEC (0.71%) / AEP (75.06%) / APS (1.25%) / BGE (1.81%) / ComEd (5.91%) / Dayton (0.86%) / DL (1.23%) / DPL (0.95%) / Dominion (3.89%) / JCPL (1.58%) / NEPTUNE (0.15%) / HTP (0.07%) / PECO (2.08%) / PEPCO (1.66%) / ECP (0.07%)* / PSEG (2.62%) / RE (0.10%)
b1465.2	Replace the 100 MVAR 765 kV shunt reactor bank on Rockport – Jefferson 765 kV line with a 300 MVAR bank at Rockport Station	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1465.3	Transpose the Rockport – Sullivan 765 kV line and the Rockport – Jefferson 765 kV line	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEP (100%)</p>
b1465.4	Make switching improvements at Sullivan and Jefferson 765 kV stations	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEP (100%)</p>
b1466.1	Create an in and out loop at Adams Station by removing the hard tap that currently exists	AEP (100%)
b1466.2	Upgrade the Adams transformer to 90 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1466.3	At Seaman Station install a new 138 kV bus and two new 138 kV circuit breakers	AEP (100%)
b1466.4	Convert South Central Co-op's New Market 69 kV Station to 138 kV	AEP (100%)
b1466.5	The Seaman – Highland circuit is already built to 138 kV, but is currently operating at 69 kV, which would now increase to 138 kV	AEP (100%)
b1466.6	At Highland Station, install a new 138 kV bus, three new 138 kV circuit breakers and a new 138/69 kV 90 MVA transformer	AEP (100%)
b1466.7	Using one of the bays at Highland, build a 138 kV circuit from Hillsboro – Highland 138 kV, which is approximately 3 miles	AEP (100%)
b1467.1	Install a 14.4 MVar Capacitor Bank at New Buffalo station	AEP (100%)
b1467.2	Reconfigure the 138 kV bus at LaPorte Junction station to eliminate a contingency resulting in loss of two 138 kV sources serving the LaPorte area	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1468.1	Expand Selma Parker Station and install a 138/69/34.5 kV transformer	AEP (100%)
b1468.2	Rebuild and convert 34.5 kV line to Winchester to 69 kV, including Farmland Station	AEP (100%)
b1468.3	Retire the 34.5 kV line from Haymond to Selma Wire	AEP (100%)
b1469.1	Conversion of the Newcomerstown – Cambridge 34.5 kV system to 69 kV operation	AEP (100%)
b1469.2	Expansion of the Derwent 69 kV Station (including reconfiguration of the 69 kV system)	AEP (100%)
b1469.3	Rebuild 11.8 miles of 69 kV line, and convert additional 34.5 kV stations to 69 kV operation	AEP (100%)
b1470.1	Build a new 138 kV double circuit off the Kanawha – Bailysville #2 138 kV circuit to Skin Fork Station	AEP (100%)
b1470.2	Install a new 138/46 kV transformer at Skin Fork	AEP (100%)
b1470.3	Replace 5 Moab's on the Kanawha – Baileysville line with breakers at the Sundial 138 kV station	AEP (100%)
b1471	Perform a sag study on the East Lima – For Lima – Rockhill 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1472	Perform a sag study on the East Lima – Haviland 138 kV line to increase the emergency rating		AEP (100%)
b1473	Perform a sag study on the East New Concord – Muskingum River section of the Muskingum River – West Cambridge 138 kV circuit		AEP (100%)
b1474	Perform a sag study on the Ohio Central – Prep Plant tap 138 kV circuit		AEP (100%)
b1475	Perform a sag study on the S73 – North Delphos 138 kV line to increase the emergency rating		AEP (100%)
b1476	Perform a sag study on the S73 – T131 138 kV line to increase the emergency rating		AEP (100%)
b1477	The Natrium – North Martin 138 kV circuit would need an electrical clearance study among other equipment upgrades		AEP (100%)
b1478	Upgrade Strouds Run – Strouds Tap 138 kV relay and riser		AEP (100%)
b1479	West Hebron station upgrades		AEP (100%)
b1480	Perform upgrades and a sag study on the Corner – Layman 138 kV section of the Corner – Muskingum River 138 kV circuit		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1481	Perform a sag study on the West Lima – Eastown Road – Rockhill 138 kV line and replace the 138 kV risers at Rockhill station to increase the emergency rating	AEP (100%)
b1482	Perform a sag study for the Albion – Robison Park 138 kV line to increase its emergency rating	AEP (100%)
b1483	Sag study 1 mile of the Clinch River – Saltville 138 kV line and replace the risers and bus at Clinch River, Lebanon and Elk Garden Stations	AEP (100%)
b1484	Perform a sag study on the Hacienda – Harper 138 kV line to increase the emergency rating	AEP (100%)
b1485	Perform a sag study on the Jackson Road – Concord 183 kV line to increase the emergency rating	AEP (100%)
b1486	The Matt Funk – Poages Mill – Starkey 138 kV line requires	AEP (100%)
b1487	Perform a sag study on the New Carlisle – Trail Creek 138 kV line to increase the emergency rating	AEP (100%)
b1488	Perform a sag study on the Olive – LaPorte Junction 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1489	A sag study must be performed for the 5.40 mile Tristate – Chadwick 138 kV line to determine if a higher emergency rating can be used	AEP (100%)
b1490.1	Establish a new 138/69 kV Butler Center station	AEP (100%)
b1490.2	Build a new 14 mile 138 kV line from Auburn station to Woods Road station VIA Butler Center station	AEP (100%)
b1490.3	Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer	AEP (100%)
b1490.4	Improve the switching arrangement at Kendallville station	AEP (100%)
b1491	Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line	AEP (100%)
b1492	Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR	AEP (100%)
b1493	Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating	AEP (100%)
b1494	Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to increase its emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1495	Add an additional 765/345 kV transformer at Baker Station	AEC (0.41%) / AEP (87.22%) / BGE (1.03%) / ComEd (3.38%) / Dayton (1.23%) / DL (1.46%) / DPL (0.54%) / JCPL (0.90%) / NEPTUNE (0.09%) / HTP (0.04%) / PECO (1.18%) / PEPCO (0.94%) / ECP** (0.04%) / PSEG (1.48%) / RE (0.06%)
b1496	Replace 138 kV bus and risers at Johnson Mountain Station	AEP (100%)
b1497	Replace 138 kV bus and risers at Leesville Station	AEP (100%)
b1498	Replace 138 kV risers at Wurno Station	AEP (100%)
b1499	Perform a sag study on Sporn A – Gavin 138 kV to determine if the emergency rating can be improved	AEP (100%)
b1500	The North East Canton – Wagenhals 138 kV circuit would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)
b1501	The Moseley – Reusens 138 kV circuit requires a sag study to determine if the emergency rating can be utilized to address a thermal loading issue for a category C3	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1502	Reconductor the Conesville East – Conesville Prep Plant Tap 138 kV section of the Conesville – Ohio Central to fix Reliability N-1-1 thermal overloads		AEP (100%)
b1659	Establish Sorenson 345/138 kV station as a 765/345 kV station		AEP (93.61%) / ATSI (2.99%) / ComEd (2.07%) / HTP (0.03%) / PENELEC (0.31%) / ECP** (0.03%) / PSEG (0.92%) / RE (0.04%)
b1659.1	Replace Sorenson 138 kV breaker 'L1'		AEP (100%)
b1659.2	Replace Sorenson 138 kV breaker 'L2' breaker		AEP (100%)
b1659.3	Replace Sorenson 138 kV breaker 'M1'		AEP (100%)
b1659.4	Replace Sorenson 138 kV breaker 'M2'		AEP (100%)
b1659.5	Replace Sorenson 138 kV breaker 'N1'		AEP (100%)
b1659.6	Replace Sorenson 138 kV breaker 'N2'		AEP (100%)
b1659.7	Replace Sorenson 138 kV breaker 'O1'		AEP (100%)
b1659.8	Replace Sorenson 138 kV breaker 'O2'		AEP (100%)
b1659.9	Replace Sorenson 138 kV breaker 'M'		AEP (100%)
b1659.10	Replace Sorenson 138 kV breaker 'N'		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1659.11	Replace Sorenson 138 kV breaker 'O'	AEP (100%)
b1659.12	Replace McKinley 138 kV breaker 'L1'	AEP (100%)
b1659.13	Establish 765 kV yard at Sorenson and install four 765 kV breakers	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (76.55%) / Dayton (7.81%) / DEOK (15.64%)
b1659.14	Build approximately 14 miles of 765 kV line from existing Dumont - Marysville line	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (64.15%) / ATSI (18.55%) / ComEd (4.15%) / Dayton (6.57%) / DL (6.27%) / EKPC (0.31%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1660	Install a 765/500 kV transformer at Cloverdale	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (57.93%) / DEOK (0.07%) / Dominion (0.12%) / EKPC (0.02%) / PEPCO (41.86%)
b1661	Install a 765 kV circuit breaker at Wyoming station	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1662	Rebuild 4 miles of 46 kV line to 138 kV from Pemberton to Cherry Creek		AEP (100%)
b1662.1	Circuit Breakers are installed at Cherry Creek (facing Pemberton) and at Pemberton (facing Tams Mtn. and Cherry Creek)		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1662.2	Install three 138 kV breakers at Grandview Station (facing Cherry Creek, Hinton, and Bradley Stations)	AEP (100%)
b1662.3	Remove Sullivan Switching Station (46 kV)	AEP (100%)
b1663	Install a new 765/138 kV transformer at Jackson Ferry substation	AEP (100%)
b1663.1	Establish a new 10 mile double circuit 138 kV line between Jackson Ferry and Wythe	AEP (100%)
b1663.2	Install 2 765 kV circuit breakers, breaker disconnect switches and associated bus work for the new 765 kV breakers, and new relays for the 765 kV breakers at Jackson's Ferry	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (100%)
b1664	Install switched capacitor banks at Kenwood 138 kV stations	AEP (100%)
b1665	Install a second 138/69 kV transformer at Thelma station	AEP (100%)
b1665.1	Construct a single circuit 69 kV line from West Paintsville to the new Paintsville station	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1665.2	Install new 7.2 MVAR, 46 kV bank at Kenwood Station	AEP (100%)
b1666	Build an 8 breaker 138 kV station tapping both circuits of the Fostoria - East Lima 138 kV line	AEP (90.65%) / Dayton (9.35%)
b1667	Establish Melmore as a switching station with both 138 kV circuits terminating at Melmore. Extend the double circuit 138 kV line from Melmore to Fremont Center	AEP (100%)
b1668	Revise the capacitor setting at Riverside 138 kV station	AEP (100%)
b1669	Capacitor setting changes at Ross 138 kV stations	AEP (100%)
b1670	Capacitor setting changes at Wooster 138 kV station	AEP (100%)
b1671	Install four 138 kV breakers in Danville area	AEP (100%)
b1676	Replace Natrium 138 kV breaker 'G (rehab)'	AEP (100%)
b1677	Replace Huntley 138 kV breaker '106'	AEP (100%)
b1678	Replace Kammer 138 kV breaker 'G'	AEP (100%)
b1679	Replace Kammer 138 kV breaker 'H'	AEP (100%)
b1680	Replace Kammer 138 kV breaker 'J'	AEP (100%)
b1681	Replace Kammer 138 kV breaker 'K'	AEP (100%)
b1682	Replace Kammer 138 kV breaker 'M'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1683	Replace Kammer 138 kV breaker 'N'	AEP (100%)
b1684	Replace Clinch River 138 kV breaker 'E1'	AEP (100%)
b1685	Replace Lincoln 138 kV breaker 'D'	AEP (100%)
b1687	Advance s0251.7 (Replace Corrid 138 kV breaker '104S')	AEP (100%)
b1688	Advance s0251.8 (Replace Corrid 138 kV breaker '104C')	AEP (100%)
b1712.1	Perform sag study on Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1712.2	Rebuild the Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1733	Perform a sag study of the Bluff Point - Jauy 138 kV line. Upgrade breaker, wavetrap, and risers at the terminal ends	AEP (100%)
b1734	Perform a sag study of Randolph - Hodgins 138 kV line. Upgrade terminal equipment	AEP (100%)
b1735	Perform a sag study of R03 - Magely 138 kV line. Upgrade terminal equipment	AEP (100%)
b1736	Perform a sag study of the Industrial Park - Summit 138 kV line	AEP (100%)
b1737	Sag study of Newcomerstown - Hillview 138 kV line. Upgrade -terminal equipment	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1738	Perform a sag study of the Wolf Creek - Layman 138 kV line. - Upgrade terminal equipment including a 138 kV breaker and wavetrapp	AEP (100%)
b1739	Perform a sag study of the Ohio Central - West Trinway 138 kV line	AEP (100%)
b1741	Replace Beatty 138 kV breaker '2C(IPP)'	AEP (100%)
b1742	Replace Beatty 138 kV breaker '1E'	AEP (100%)
b1743	Replace Beatty 138 kV breaker '2E'	AEP (100%)
b1744	Replace Beatty 138 kV breaker '3C'	AEP (100%)
b1745	Replace Beatty 138 kV breaker '2W'	AEP (100%)
b1746	Replace St. Claire 138 kV breaker '8'	AEP (100%)
b1747	Replace Cloverdale 138 kV breaker 'C'	AEP (100%)
b1748	Replace Cloverdale 138 kV breaker 'D1'	AEP (100%)
b1780	Install two 138kV breakers and two 138kV circuit switchers at South Princeton Station and one 138kV breaker and one 138kV circuit switcher at Switchback Station	AEP (100%)
b1781	Install three 138 kV breakers and a 138kV circuit switcher at Trail Fork Station in Pineville, WV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1782	Install a 46kV Moab at Montgomery Station facing Carbondale (on the London - Carbondale 46 kV circuit)	AEP (100%)
b1783	Add two 138 kV Circuit Breakers and two 138 kV circuit switchers on the Lonesome Pine - South Bluefield 138 kV line	AEP (100%)
b1784	Install a 52.8 MVAR capacitor bank at the Clifford 138 kV station	AEP (100%)
b1811.1	Perform a sag study of 4 miles of the Waterford - Muskingum line	AEP (100%)
b1811.2	Rebuild 0.1 miles of Waterford - Muskingum 345 kV with 1590 ACSR	AEP (100%)
b1812	Reconductor the AEP portion of the South Canton - Harmon 345 kV with 954 ACSR and upgrade terminal equipment at South Canton. Expected rating is 1800 MVA S/N and 1800 MVA S/E	AEP (100%)
b1817	Install (3) 345 kV circuit breakers at East Elkhart station in ring bus designed as a breaker and half scheme	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1818	Expand the Allen station by installing a second 345/138 kV transformer and adding four 138 kV exits by cutting in the Lincoln - Sterling and Milan - Timber Switch 138 kV double circuit tower line	AEP (88.30%) / ATSI (8.86%) / Dayton (2.84%)
b1819	Rebuild the Robinson Park - Sorenson 138 kV line corridor as a 345 kV double circuit line with one side operated at 345 kV and one side at 138 kV	AEP (87.18%) / ATSI (10.06%) / Dayton (2.76%)
b1859	Perform a sag study for Hancock - Cave Spring - Roanoke 138 kV circuit to reach new SE ratings of 272MVA (Cave Spring-Hancock), 205MVA (Cave Spring-Sunscape), 245MVA (ROANO2-Sunscape)	AEP (100%)
b1860	Perform a sag study on the Crooksville - Spencer Ridge section (14.3 miles) of the Crooksville-Poston-Strouds Run 138 kV circuit to see if any remedial action needed to reach the SE rating (175MVA)	AEP (100%)
b1861	Reconductor 0.83 miles of the Dale - West Canton 138 kV Tie-line and upgrade risers at West Canton 138 kV	AEP (100%)
b1862	Perform a sag study on the Grant - Greentown 138 kV circuit and replace the relay CT at Grant 138 kV station to see if any remedial action needed to reach the new ratings of 251/286MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1863	Perform a sag study of the Kammer - Wayman SW 138 kV line to see if any remedial action needed to reach the new SE rating of 284MVA	AEP (100%)
b1864.1	Add two additional 345/138 kV transformers at Kammer	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.2	Add second West Bellaire - Brues 138 kV circuit	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.3	Replace Kammer 138 kV breaker 'E'	AEP (100%)
b1865	Perform a sag study on the Kanawha - Carbondale 138 kV line to see if any remedial action needed to reach the new ratings of 251/335MVA	AEP (100%)
b1866	Perform a sag study on the Clinch River-Lock Hart-Dorton 138kV line,increase the Relay Compliance Trip Limit at Clinch River on the C.R.-Dorton 138kV line to 310 and upgrade the risers with 1590ACSR	AEP (100%)
b1867	Perform a sag study on the Newcomerstown - South Coshocton 138 kV line to see if any remedial action is needed to reach the new SE rating of 179MVA	AEP (100%)
b1868	Perform sag study on the East Lima - new Liberty 138 kV line to see if any remedial action is needed to reach the new SE rating of 219MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1869	Perform a sag study of the Ohio Central - South Coshocton 138 kV circuit to see if any remedial action needed to reach the new SE ratings of 250MVA	AEP (100%)
b1870	Replace the Ohio Central transformer #1 345/138/12 kV 450 MVA for a 345/138/34.5 kV 675 MVA transformer	AEP (68.16%) / ATSI (25.27%) / Dayton (3.88%) / PENELEC (1.59%) / DEOK (1.10%)
b1871	Perform a sag study on the Central - West Coshocton 138 kV line (improving the emergency rating of this line to 254 MVA)	AEP (100%)
b1872	Add a 57.6 MVAR capacitor bank at East Elkhart 138 kv station in Indiana	AEP (100%)
b1873	Install two 138 kV circuit breakers at Cedar Creek Station and primary side circuit switcher on the 138/69/46 kV transformer	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1874	Install two 138 kV circuit breakers and one 138 kV circuit switcher at Magely 138 kV station in Indiana	AEP (100%)
b1875	Build 25 miles of new 138 kV line from Bradley Station through Tower 117 Station and terminating at McClung 138 kV station. Existing 69 kV distribution transformers will be replaced with 138 kV transformers	AEP (100%)
b1876	Install a 14.4 MVar capacitor bank at Capital Avenue (AKA Currant Road) 34.5 kV bus	AEP (100%)
b1877	Relocate 138 kV Breaker G to the West Kingsport - Industry Drive 138 kV line and Remove 138 kV MOAB	AEP (100%)
b1878	Perform a sag study on the Lincoln - Robinson Park 138 kV line (Improve the emergency rating to 244 MVA)	AEP (100%)
b1879	Perform a sag study on the Hansonville - Meadowview 138 kV line (Improve the emergency rating to 245 MVA)	AEP (100%)
b1880	Rebuild the 15 miles of the Moseley - Roanoke 138 kV line. This project would consist of rebuilding both circuits on the double circuit line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1881	Replace existing 600 Amp switches, station risers and increase the CT ratios associated with breaker 'G' at Sterling 138 kV Station. It will increase the rating to 296 MVA S/N and 384 MVA S/E	AEP (100%)
b1882	Perform a sag study on the Bluff Point - Randolph 138 kV line to see if any remedial action needed to reach the new SE rating of 255 MVA	AEP (100%)
b1883	Switch the breaker position of transformer #1 and SW Lima at East Lima 345 kV bus	AEP (100%)
b1884	Perform a sag study on Strawton station - Fisher Body - Deer Creek 138 kV line to see if any remedial action needed to reach the new SE rating of 250 MVA	AEP (100%)
b1887	Establish a new 138/69 kV source at Carrollton and construct two new 69 kV lines from Carrollton to tie into the Dennison - Miller SW 69 kV line and to East Dover 69 kV station respectively	AEP (100%)
b1888	Install a 69 kV line breaker at Blue Pennant 69 kV Station facing Bim Station and 14.4 MVar capacitor bank	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1889	Install a 43.2 MVAR capacitor bank at Hinton 138 kV station (APCO WV)	AEP (100%)
b1901	Rebuild the Ohio Central - West Trinway (4.84 miles) section of the Academia - Ohio Central 138 kV circuit. Upgrade the Ohio Central riser, Ohio Central switch and the West Trinway riser	AEP (100%)
b1904.1	Construct new 138/69 Michiana Station near Bridgman by tapping the new Carlisle - Main Street 138 kV and the Bridgman - Buchanan Hydro 69 kV line	AEP (100%)
b1904.2	Establish a new 138/12 kV New Galien station by tapping the Olive - Hickory Creek 138 kV line	AEP (100%)
b1904.3	Retire the existing Galien station and move its distribution load to New Galien station. Retire the Buchanan Hydro - New Carlisle 34.5 kV line	AEP (100%)
b1904.4	Implement an in and out scheme at Cook 69 kV by eliminating the Cook 69 kV tap point and by installing two new 69 kV circuit breakers	AEP (100%)
b1904.5	Rebuild the Bridgman - Cook 69 kV and the Derby - Cook 69 kV lines	AEP (100%)
b1946	Perform a sag study on the Brues – West Bellaire 138 kV line	AEP (100%)
b1947	A sag study of the Dequine - Meadowlake 345 kV line #1 line may improve the emergency rating to 1400 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1948	Establish a new 765/345 interconnection at Sporn. Install a 765/345 kV transformer at Mountaineer and build ¾ mile of 345 kV to Sporn	ATSI (61.08%) / DL (21.87%) / Dominion (13.97%) / PENELEC (3.08%)
b1949	Perform a sag study on the Grant Tap – Deer Creek 138 kV line and replace bus and risers at Deer Creek station	AEP (100%)
b1950	Perform a sag study on the Kammer – Ormet 138 kV line of the conductor section	AEP (100%)
b1951	Perform a sag study of the Maddox- Convoy 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1952	Perform a sag study of the Maddox – T130 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1953	Perform a sag study of the Meadowlake - Olive 345 kV line to improve the emergency rating to 1400 MVA	AEP (100%)
b1954	Perform a sag study on the Milan - Harper 138 kV line and replace bus and switches at Milan Switch station	AEP (100%)
b1955	Perform a sag study of the R-049 - Tillman 138 kV line may improve the emergency rating to 245 MVA	AEP (100%)



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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1956	Perform a sag study of the Tillman - Dawkins 138 kV line may improve the emergency rating to 245 MVA	AEP (100%)
b1957	Terminate Transformer #2 at SW Lima in a new bay position	AEP (69.41%) / ATSI (23.11%) / ECP** (0.17%) / HTP (0.19%) / PENELEC (2.42%) / PSEG (4.52%) / RE (0.18%)
b1958	Perform a sag study on the Brookside - Howard 138 kV line and replace bus and risers at AEP Howard station	AEP (100%)
b1960	Sag Study on 7.2 miles SE Canton-Canton Central 138kV ckt	AEP (100%)
b1961	Sag study on the Southeast Canton – Sunnyside 138kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1962	Add four 765 kV breakers at Kammer	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEP (100%)</p>
b1963	Build approximately 1 mile of circuit comprising of 2-954 ACSR to get the rating of Waterford-Muskinum 345 kV higher	AEP (100%)
b1970	Reconductor 13 miles of the Kammer – West Bellaire 345kV circuit	APS (33.51%) / ATSI (32.21%) / DL (18.64%) / Dominion (6.01%) / ECP** (0.10%) / HTP (0.11%) / JCPL (1.68%) / Neptune* (0.18%) / PENELEC (4.58%) / PSEG (2.87%) / RE (0.11%)
b1971	Perform a sag study to improve the emergency rating on the Bridgville – Chandlersville 138 kV line	AEP (100%)
b1972	Replace disconnect switch on the South Canton 765/345 kV transformer	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1973	Perform a sag study to improve the emergency rating on the Carrollton – Sunnyside 138 kV line	AEP (100%)
b1974	Perform a sag study to improve the emergency rating on the Bethel Church – West Dover 138 kV line	AEP (100%)
b1975	Replace a switch at South Millersburg switch station	AEP (100%)
b2017	Reconductor or rebuild Sporn - Waterford - Muskingum River 345 kV line	ATSI (37.04%) / AEP (34.35%) / DL (10.41%) / Dominion (6.19%) / APS (3.94%) / PENELEC (3.09%) / JCPL (1.39%) / Dayton (1.20%) / Neptune* (0.14%) / HTP (0.09%) / ECP** (0.08%) / PSEG (2.00%) / RE (0.08%)
b2018	Loop Conesville - Bixby 345 kV circuit into Ohio Central	ATSI (58.58%) / AEP (14.16%) / APS (12.88%) / DL (7.93%) / PENELEC (5.73%) / Dayton (0.72%)
b2019	Establish Burger 345/138 kV station	AEP (93.74%) / APS (4.40%) / DL (1.11%) / ATSI (0.74%) / PENELEC (0.01%)
b2020	Rebuild Amos - Kanawah River 138 kV corridor	AEP (88.39%) / APS (7.12%) / ATSI (2.89%) / DEOK (1.58%) / PEPCO (0.02%)
b2021	Add 345/138 transformer at Sporn, Kanawah River & Muskingum River stations	AEP (91.92%) / DEOK (3.60%) / APS (2.19%) / ATSI (1.14%) / DL (1.08%) / PEPCO (0.04%) / BGE (0.03%)
b2021.1	Replace Kanawah 138 kV breaker 'L'	AEP (100%)
b2021.2	Replace Muskingum 138 kV breaker 'HG'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2021.3	Replace Muskingum 138 kV breaker 'HJ'	AEP (100%)
b2021.4	Replace Muskingum 138 kV breaker 'HE'	AEP (100%)
b2021.5	Replace Muskingum 138 kV breaker 'HD'	AEP (100%)
b2021.6	Replace Muskingum 138 kV breaker 'HF'	AEP (100%)
b2021.7	Replace Muskingum 138 kV breaker 'HC'	AEP (100%)
b2021.8	Replace Sporn 138 kV breaker 'D1'	AEP (100%)
b2021.9	Replace Sporn 138 kV breaker 'D2'	AEP (100%)
b2021.10	Replace Sporn 138 kV breaker 'F1'	AEP (100%)
b2021.11	Replace Sporn 138 kV breaker 'F2'	AEP (100%)
b2021.12	Replace Sporn 138 kV breaker 'G'	AEP (100%)
b2021.13	Replace Sporn 138 kV breaker 'G2'	AEP (100%)
b2021.14	Replace Sporn 138 kV breaker 'N1'	AEP (100%)
b2021.15	Replace Kanawah 138 kV breaker 'M'	AEP (100%)
b2022	Terminate Tristate - Kyger Creek 345 kV line at Sporn	AEP (97.99%) / DEOK (2.01%)
b2027	Perform a sag study of the Tidd - Collier 345 kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2028	Perform a sag study on East Lima - North Woodcock 138 kV line to improve the rating	AEP (100%)
b2029	Perform a sag study on Bluebell - Canton Central 138 kV line to improve the rating	AEP (100%)
b2030	Install 345 kV circuit breakers at West Bellaire	AEP (100%)
b2031	Sag study on Tilton - W. Bellaire section 1 (795 ACSR), about 12 miles	AEP (100%)
b2032	Rebuild 138 kV Elliot tap - Poston line	ATSI (73.02%) / Dayton (19.39%) / DL (7.59%)
b2033	Perform a sag study of the Brues - W. Bellaire 138 kV line	AEP (100%)
b2046	Adjust tap settings for Muskingum River transformers	AEP (100%)
b2047	Replace relay at Greenlawn	AEP (100%)
b2048	Replace both 345/138 kV transformers with one bigger transformer	AEP (92.49%) / Dayton (7.51%)
b2049	Replace relay	AEP (100%)
b2050	Perform sag study	AEP (100%)
b2051	Install 3 138 kV breakers and a circuit switcher at Dorton station	AEP (100%)
b2052	Replace transformer	AEP (67.17%) / ATSI (27.37%) / Dayton (3.73%) / PENELEC (1.73%)
b2054	Perform a sag study of Sporn - Rutland 138 kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2069	Replace George Washington 138 kV breaker 'A' with 63kA rated breaker	AEP (100%)
b2070	Replace Harrison 138 kV breaker '6C' with 63kA rated breaker	AEP (100%)
b2071	Replace Lincoln 138 kV breaker 'L' with 63kA rated breaker	AEP (100%)
b2072	Replace Natrum 138 kV breaker 'T' with 63kA rated breaker	AEP (100%)
b2073	Replace Darrah 138 kV breaker 'B' with 63kA rated breaker	AEP (100%)
b2074	Replace Wyoming 138 kV breaker 'G' with 80kA rated breaker	AEP (100%)
b2075	Replace Wyoming 138 kV breaker 'G1' with 80kA rated breaker	AEP (100%)
b2076	Replace Wyoming 138 kV breaker 'G2' with 80kA rated breaker	AEP (100%)
b2077	Replace Wyoming 138 kV breaker 'H' with 80kA rated breaker	AEP (100%)
b2078	Replace Wyoming 138 kV breaker 'H1' with 80kA rated breaker	AEP (100%)
b2079	Replace Wyoming 138 kV breaker 'H2' with 80kA rated breaker	AEP (100%)
b2080	Replace Wyoming 138 kV breaker 'J' with 80kA rated breaker	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2081	Replace Wyoming 138 kV breaker 'J1' with 80kA rated breaker	AEP (100%)
b2082	Replace Wyoming 138 kV breaker 'J2' with 80kA rated breaker	AEP (100%)
b2083	Replace Natrum 138 kV breaker 'K' with 63kA rated breaker	AEP (100%)
b2084	Replace Tanner Creek 345 kV breaker 'P' with 63kA rated breaker	AEP (100%)
b2085	Replace Tanner Creek 345 kV breaker 'P2' with 63kA rated breaker	AEP (100%)
b2086	Replace Tanner Creek 345 kV breaker 'Q1' with 63kA rated breaker	AEP (100%)
b2087	Replace South Bend 138 kV breaker 'T' with 63kA rated breaker	AEP (100%)
b2088	Replace Tidd 138 kV breaker 'L' with 63kA rated breaker	AEP (100%)
b2089	Replace Tidd 138 kV breaker 'M2' with 63kA rated breaker	AEP (100%)
b2090	Replace McKinley 138 kV breaker 'A' with 40kA rated breaker	AEP (100%)
b2091	Replace West Lima 138 kV breaker 'M' with 63kA rated breaker	AEP (100%)
b2092	Replace George Washington 138 kV breaker 'B' with 63kA rated breaker	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2093	Replace Turner 138 kV breaker 'W' with 63kA rated breaker	AEP (100%)
b2135	Build a new 138 kV line from Falling Branch to Merrimac and add a 138/69 kV transformer at Merrimac Station	AEP (100%)
b2160	Add a fourth circuit breaker to the station being built for the U4-038 project (Conelley), rebuild U4-038 - Grant Tap line as double circuit tower line	AEP (100%)
b2161	Rebuild approximately 20 miles of the Allen - S073 double circuit 138 kV line (with one circuit from Allen - Tillman - Timber Switch - S073 and the other circuit from Allen - T-131 - S073) utilizing 1033 ACSR	AEP (100%)
b2162	Perform a sag study to improve the emergency rating of the Belpre - Degussa 138 kV line	AEP (100%)
b2163	Replace breaker and wavetrapp at Jay 138 kV station	AEP (100%)

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\*\*East Coast Power, L.L.C.



## SCHEDULE 12 – APPENDIX

### (20) Virginia Electric and Power Company

Required Transmission Enhancements		Annual Revenue Requirement***	Responsible Customer(s)
b0217	Upgrade Mt. Storm - Doubs 500kV		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)
b0222	Install 150 MVAR capacitor at Loudoun 500 kV		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (88.62%) / PEPCO (11.38%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

\*\*\*\* The Annual Revenue Requirement for all Virginia Electric and Power Company projects in this Section 20 shall be as specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B.

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0223	Install 150 MVAR capacitor at Asburn 230 kV		Dominion (100%)
b0224	Install 150 MVAR capacitor at Dranesville 230 kV		Dominion (100%)
b0225	Install 33 MVAR capacitor at Possum Pt. 115 kV		Dominion (100%)
b0226	Install 500/230 kV transformer at Clifton and Clifton 500 kV 150 MVAR capacitor	As specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B	APS (3.69%) / BGE (3.54%) / Dominion (85.73%) / PEPCO (7.04%)
b0227	Install 500/230 kV transformer at Bristers; build new 230 kV Bristers-Gainsville circuit, upgrade two Loudoun-Brambleton circuits		AEC (0.71%) / APS (3.36%) / BGE (10.93%) / DPL (1.66%) / Dominion (67.38%) / ME (0.89%) / PECO (2.33%) / PEPCO (12.20%) / PPL (0.54%)
b0227.1	Loudoun Sub – upgrade 6-230 kV breakers		Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0231	Install 500 kV breakers & 500 kV bus work at Suffolk		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (100%)
b0231.2	Install 500/230 kV Transformer, 230 kV breakers, & 230 kV bus work at Suffolk		Dominion (100%)
b0232	Install 150 MVAR capacitor at Lynnhaven 230 kV		Dominion (100%)
b0233	Install 150 MVAR capacitor at Landstown 230 kV		Dominion (100%)
b0234	Install 150 MVAR capacitor at Greenwich 230 kV		Dominion (100%)
b0235	Install 150 MVAR capacitor at Fentress 230 kV		Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0307	Reconductor Endless Caverns – Mt. Jackson 115 kV		Dominion (100%)
b0308	Replace L breaker and switches at Endless Caverns 115 kV		Dominion (100%)
b0309	Install SPS at Earleys 115 kV		Dominion (100%)
b0310	Reconductor Club House – South Hill and Chase City – South Hill 115 kV		Dominion (100%)
b0311	Reconductor Idylwood to Arlington 230 kV		Dominion (100%)
b0312	Reconductor Gallows to Ox 230 kV		Dominion (100%)
b0325	Install a 2 <sup>nd</sup> Everetts 230/115 kV transformer		Dominion (100%)
b0326	Uprate/resag Remington-Brandywine-Culppr 115 kV		Dominion (100%)
b0327	Build 2 <sup>nd</sup> Harrisonburg – Valley 230 kV		APS (19.79%) / Dominion (76.18%) / PEPCO (4.03%)
b0328.1	Build new Meadow Brook – Loudoun 500 kV circuit (30 of 50 miles)		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (88.62%) / PEPCO (11.38%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.3	Upgrade Mt. Storm 500 kV substation	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (36.43%) / Dominion (49.99%) / PEPCO (13.58%)
b0328.4	Upgrade Loudoun 500 kV substation	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (88.62%) / PEPCO (11.38%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit	<b>Load Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> Dominion (100%)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit	Dominion (100%)††
b0329.1	Replace Thole Street 115 kV breaker ‘48T196’	Dominion (100%)
b0329.2	Replace Chesapeake 115 kV breaker ‘T242’	Dominion (100%)
b0329.3	Replace Chesapeake 115 kV breaker ‘8722’	Dominion (100%)
b0329.4	Replace Chesapeake 115 kV breaker ‘16422’	Dominion (100%)
b0330	Install Crewe 115 kV breaker and shift load from line 158 to 98	Dominion (100%)
b0331	Upgrade/resag Shell Bank – Whealton 115 kV (Line 165)	Dominion (100%)

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†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0332	Uprate/resag Chesapeake – Cradock 115 kV	Dominion (100%)
b0333	Replace wave trap on Elmont – Replace (Line #231)	Dominion (100%)
b0334	Uprate/resag Iron Bridge-Walmsley-Southwest 230 kV	Dominion (100%)
b0335	Build Chase City – Clarksville 115 kV	Dominion (100%)
b0336	Reconductor one span of Chesapeake – Dozier 115 kV close to Dozier substation	Dominion (100%)
b0337	Build Lexington 230 kV ring bus	Dominion (100%)
b0338	Replace Gordonsville 230/115 kV transformer for larger one	Dominion (100%)
b0339	Install Breaker at Doms 230 kV Sub	Dominion (100%)
b0340	Reconductor one span Peninsula – Magruder 115 kV close to Magruder substation	Dominion (100%)
b0341	Install a breaker at Northern Neck 115 kV	Dominion (100%)
b0342	Replace Trowbridge 230/115 kV transformer	Dominion (100%)
b0403	2 <sup>nd</sup> Doms 500/230 kV transformer addition	APS (3.35%) / BGE (4.22%) / DPL (1.10%) / Dominion (83.94%) / PEPCO (7.39%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0412	Retension Pruntytown – Mt. Storm 500 kV to a 3502 MVA rating	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> APS (46.82%) / PEPCO (53.18%)
b0450	Install 150 MVAR Capacitor at Fredricksburg 230 kV	Dominion (100%)
b0451	Install 25 MVAR Capacitor at Somerset 115 kV	Dominion (100%)
b0452	Install 150 MVAR Capacitor at Northwest 230 kV	Dominion (100%)
b0453.1	Convert Remington – Sowego 115 kV to 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.2	Add Sowego – Gainesville 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.3	Add Sowego 230/115 kV transformer	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0454	Reconductor 2.4 miles of Newport News – Chuckatuck 230 kV	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0455	Add 2 <sup>nd</sup> Endless Caverns 230/115 kV transformer	APS (32.70%) / BGE (7.01%) / DPL (1.80%) / Dominion (50.82%) / PEPCO (7.67%)
b0456	Reconductor 9.4 miles of Edinburg – Mt. Jackson 115 kV	APS (33.69%) / BGE (12.18%) / Dominion (40.08%) / PEPCO (14.05%)
b0457	Replace both wave traps on Doods – Lexington 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> DEOK (1.12%) / Dominion (85.91%) / EKPC (0.33%) / PEPCO (12.64%)
b0467.2	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.54%) / PEPCO (41.86%) / PPL (2.07%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.6	Replace Mount Storm 500 kV breaker 55072	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0492.7	Replace Mount Storm 500 kV breaker 55172	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.8	Replace Mount Storm 500 kV breaker H1172-2	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS  (9.22%) / BGE (4.41%) / DL  (0.02%) / DPL (6.88%) / Dominion  (10.77%) / ECP (0.44%) / JCPL  (11.59%) / ME (2.93%) /  NEPTUNE (1.11%) / PECO  (14.45%) / PEPCO (6.08%) / PPL  (6.36%) / PSEG (15.79%) / RE  (0.59%)</p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.9	Replace Mount Storm 500 kV breaker G2T550	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0492.10	Replace Mount Storm 500 kV breaker G2T554	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.11	Replace Mount Storm 500 kV breaker GIT551	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (4.99%) / AEP (4.37%) / APS  (9.22%) / BGE (4.41%) / DL  (0.02%) / DPL (6.88%) / Dominion  (10.77%) / ECP (0.44%) / JCPL  (11.59%) / ME (2.93%) /  NEPTUNE (1.11%) / PECO  (14.45%) / PEPCO (6.08%) / PPL  (6.36%) / PSEG (15.79%) / RE  (0.59%)</p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.12	Upgrade nameplate rating of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (4.99%) / AEP (4.37%) / APS (9.22%) / BGE (4.41%) / DL (0.02%) / DPL (6.88%) / Dominion (10.77%) / ECP (0.44%) / JCPL (11.59%) / ME (2.93%) / NEPTUNE (1.11%) / PECO (14.45%) / PEPCO (6.08%) / PPL (6.36%) / PSEG (15.79%) / RE (0.59%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.5	Advance n0716 (Ox - Replace 230kV breaker L242)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>
b0512.6	Advance n0717 (Possum Point - Replace 230kV breaker SC192)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.52%) / DPL (14.68%) / Dominion (0.30%) / ECP (0.38%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.51%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.37%) / RE (0.54%)</p>

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0583	Install dual primary protection schemes on Gosport lines 62 and 51 at the remote terminals (Chesapeake on the 62 line and Reeves Ave on the 51 line)	Dominion (100%)
b0756	Install a second 500/115 kV autotransformer at Chancellor 500 kV	Dominion (100%)
b0756.1	Install two 500 kV breakers at Chancellor 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0757	Reconductor one mile of Chesapeake – Reeves Avenue 115 kV line	Dominion (100%)
b0758	Install a second Fredericksburg 230/115 kV autotransformer	Dominion (100%)
b0760	Build 115 kV line from Kitty Hawk to Colington 115 kV (Colington on the existing line and Nag's Head and Light House DP on new line)	Dominion (100%)
b0761	Install a second 230/115 kV transformer at Possum Point	Dominion (100%)
b0762	Build a new Elko station and transfer load from Turner and Providence Forge stations	Dominion (100%)
b0763	Rebuild 17.5 miles of the line for a new summer rating of 262 MVA	Dominion (100%)
b0764	Increase the rating on 2.56 miles of the line between Greenwich and Thompson Corner; new rating to be 257 MVA	Dominion (100%)
b0765	Add a second Bull Run 230/115 kV autotransformer	Dominion (100%)
b0766	Increase the rating of the line between Loudoun and Cedar Grove to at least 150 MVA	Dominion (100%)
b0767	Extend the line from Old Church – Chickahominy 230 kV	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0768	Loop line #251 Idylwood – Arlington into the GIS sub	Dominion (100%)
b0769	Re-tension 15 miles of the line for a new summer rating of 216 MVA	Dominion (100%)
b0770	Add a second 230/115 kV autotransformer at Lanexa	Dominion (100%)
b0770.1	Replace Lanexa 115 kV breaker '8532'	Dominion (100%)
b0770.2	Replace Lanexa 115 kV breaker '9232'	Dominion (100%)
b0771	Build a parallel Chickahominy – Lanexa 230 kV line	Dominion (100%)
b0772	Install a second Elmont 230/115 kV autotransformer	Dominion (100%)
b0772.1	Replace Elmont 115 kV breaker '7392'	Dominion (100%)
b0774	Install a 33 MVAR capacitor at Bremo 115 kV	Dominion (100%)
b0775	Reconductor the Greenwich – Virginia Beach line to bring it up to a summer rating of 261 MVA; Reconductor the Greenwich – Amphibious Base line to bring it up to 291 MVA	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0776	Re-build Trowbridge – Winfall 115 kV	Dominion (100%)
b0777	Terminate the Thelma – Carolina 230 kV circuit into Lakeview 230 kV	Dominion (100%)
b0778	Install 29.7 MVAR capacitor at Lebanon 115 kV	Dominion (100%)
b0779	Build a new 230 kV line from Yorktown to Hayes but operate at 115 kV initially	Dominion (100%)
b0780	Reconductor Chesapeake – Yadkin 115 kV line	Dominion (100%)
b0781	Reconductor and replace terminal equipment on line 17 and replace the wave trap on line 88	Dominion (100%)
b0782	Install a new 115 kV capacitor at Dupont Waynesboro substation	Dominion (100%)
b0784	Replace wave traps on North Anna to Ladysmith 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)
b0785	Rebuild the Chase City – Crewe 115 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0786	Reconductor the Moran DP – Crewe 115 kV segment	Dominion (100%)
b0787	Upgrade the Chase City – Twitty’s Creek 115 kV segment	Dominion (100%)
b0788	Reconductor the line from Farmville – Pamplin 115 kV	Dominion (100%)
b0793	Close switch 145T183 to network the lines. Rebuild the section of the line #145 between Possum Point – Minnieville DP 115 kV	Dominion (100%)
b0815	Replace Elmont 230 kV breaker '22192'	Dominion (100%)
b0816	Replace Elmont 230 kV breaker '21692'	Dominion (100%)
b0817	Replace Elmont 230 kV breaker '200992'	Dominion (100%)
b0818	Replace Elmont 230 kV breaker '2009T2032'	Dominion (100%)
b0837	At Mt. Storm, replace the existing MOD on the 500 kV side of the transformer with a circuit breaker	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0888	Replace Loudoun 230 kV Cap breaker 'SC352'		Dominion (100%)
b0892	Replace Chesapeake 115 kV breaker SX522		Dominion (100%)
b0893	Replace Chesapeake 115 kV breaker T202		Dominion (100%)
b0894	Replace Possum Point 115 kV breaker SX-32		Dominion (100%)
b0895	Replace Possum Point 115 kV breaker L92-1		Dominion (100%)
b0896	Replace Possum Point 115 kV breaker L92-2		Dominion (100%)
b0897	Replace Suffolk 115 kV breaker T202		Dominion (100%)
b0898	Replace Peninsula 115 kV breaker SC202		Dominion (100%)
b0921	Reconductor Brambleton - Cochran Mill 230 kV line with 201 Yukon conductor		Dominion (100%)
b0923	Install 50-100 MVAR variable reactor banks at Carson 230 kV		Dominion (100%)
b0924	Install 50-100 MVAR variable reactor banks at Doods 230 kV		Dominion (100%)
b0925	Install 50-100 MVAR variable reactor banks at Garrisonville 230 kV		Dominion (100%)
b0926	Install 50-100 MVAR variable reactor banks at Hamilton 230 kV		Dominion (100%)
b0927	Install 50-100 MVAR variable reactor banks at Yadkin 230 kV		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0928	Install 50-100 MVAR variable reactor banks at Carolina, Doods, Everetts, Idylwood, N. Alexandria, N. Anna, Suffolk and Valley 230 kV substations	Dominion (100%)
b1056	Build a 2nd Shawboro – Elizabeth City 230kV line	Dominion (100%)
b1058	Add a third 230/115 kV transformer at Suffolk substation	Dominion (100%)
b1058.1	Replace Suffolk 115 kV breaker 'T122' with a 40 kA breaker	Dominion (100%)
b1058.2	Convert Suffolk 115 kV straight bus to a ring bus for the three 230/115 kV transformers and three 115 kV lines	Dominion (100%)
b1071	Rebuild the existing 115 kV corridor between Landstown - Va Beach Substation for a double circuit arrangement (230 kV & 115 kV)	Dominion (100%)
b1076	Replace existing North Anna 500-230kV transformer with larger unit	Dominion (100%)
b1087	Replace Cannon Branch 230-115 kV with larger transformer	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1088	Build new Radnor Heights Sub, add new underground circuit from Ballston - Radnor Heights, Tap the Glebe - Davis line and create circuits from Davis - Radnor Heights and Glebe - Radnor Heights		Dominion (100%)
b1089	Install 2nd Burke to Sideburn 230 kV underground cable		Dominion (100%)
b1090	Install a 150 MVAR 230 kV capacitor and one 230 kV breaker at Northwest		Dominion (100%)
b1095	Reconductor Chase City 115 kV bus and add a new tie breaker		Dominion (100%)
b1096	Construct 10 mile double ckt. 230kV tower line from Loudoun to Middleburg		Dominion (100%)
b1102	Replace Bremo 115 kV breaker '9122'		Dominion (100%)
b1103	Replace Bremo 115 kV breaker '822'		Dominion (100%)
b1172	Build a 4-6 mile long 230 kV line from Hopewell to Bull Hill (Ft Lee) and install a 230-115 kV Tx		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1188	Build new Brambleton 500 kV three breaker ring bus connected to the Loudoun to Pleasant View 500 kV line		<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
			<b>DFAX Allocation:</b> Dominion (100%)
b1188.1	Replace Loudoun 230 kV breaker '200852' with a 63 kA breaker		Dominion (100%)
b1188.2	Replace Loudoun 230 kV breaker '2008T2094' with a 63 kA breaker		Dominion (100%)
b1188.3	Replace Loudoun 230 kV breaker '204552' with a 63 kA breaker		Dominion (100%)
b1188.4	Replace Loudoun 230 kV breaker '209452' with a 63 kA breaker		Dominion (100%)
b1188.5	Replace Loudoun 230 kV breaker 'WT2045' with a 63 kA breaker		Dominion (100%)
b1188.6	Install one 500/230 kV transformer and two 230 kV breakers at Brambleton		AEC (0.22%) / BGE (7.90%) / DPL (0.59%) / Dominion (75.58%) / ME (0.22%) / PECO (0.73%) / PEPCO (14.76%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1224	Install 2nd Clover 500/230 kV transformer and a 150 MVar capacitor		BGE (7.56%) / DPL (1.03%) / Dominion (78.21%) / ME (0.77%) / PECO (1.39%) / PEPCO (11.04%)
b1225	Replace Yorktown 115 kV breaker 'L982-1'		Dominion (100%)
b1226	Replace Yorktown 115 kV breaker 'L982-2'		Dominion (100%)
b1279	Line #69 Uprate – Increase rating on Locks – Purdy 115 kV to serve additional load at the Reams delivery point		Dominion (100%)
b1306	Reconfigure 115 kV bus at Endless Caverns substation such that the existing two 230/115 kV transformers at Endless Caverns operate in		Dominion (100%)
b1307	Install a 2nd 230/115 kV transformer at Northern Neck Substation		Dominion (100%)
b1308	Improve LSE's power factor in zone to .973 PF, adjust LTC's at Gordonsville and Remington, move existing shunt capacitor banks		Dominion (100%)
b1309	Install a 230 kV line from Lakeside to Northwest utilizing the idle line and 60 line ROW's and reconductor the existing 221 line between Elmont and Northwest		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1310 Install a 115 kV breaker at Broadnax substation on the South Hill side of Broadnax		Dominion (100%)
b1311 Install a 230 kV 3000 amp breaker at Cranes Corner substation to sectionalize the 2104 line into two lines		Dominion (100%)
b1312 Loop the 2054 line in and out of Hollymeade and place a 230 kV breaker at Hollymeade. This creates two lines: Charlottesville - Hollymeade		Dominion (100%)
b1313 Resag wire to 125C from Chesterfield – Shockoe and replace line switch 1799 with 1200 amp switch. The new rating would be 231 MVA.		Dominion (100%)
b1314 Rebuild the 6.8 mile line #100 from Chesterfield to Harrowgate 115 kV for a minimum 300 MBA rating		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1315	Convert line #64 Trowbridge to Winfall to 230 kV and install a 230 kV capacitor bank at Winfall		Dominion (100%)
b1316	Rebuild 10.7 miles of 115 kV line #80, Battleboro – Heartsease DP		Dominion (100%)
b1317	LSE load power factor on the #47 line will need to meet MOA requirements of .973 in 2015 to further resolve this issue through at least 2019		Dominion (100%)
b1318	Install a 115 kV bus tie breaker at Acca substation between the Line #60 and Line #95 breakers		Dominion (100%)
b1319	Resag line #222 to 150 C and upgrade any associated equipment to a 2000A rating to achieve a 706 MVA summer line rating		Dominion (100%)
b1320	Install a 230 kV, 150 MVAR capacitor bank at Southwest substation		Dominion (100%)
b1321	Build a new 230 kV line North Anna – Oak Green and install a 224 MVA 230/115 kV transformer at Oak Green		BGE (0.85%) / Dominion (97.96%) / PEPCO (1.19%)
b1322	Rebuild the 39 Line (Dooms – Sherwood) and the 91 Line (Sherwood – Bremono)		Dominion (100%)
b1323	Install a 224 MVA 230/115 kV transformer at Staunton. Rebuild the 115 kV line #43 section Staunton - Verona		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1324	Install a 115 kV capacitor bank at Oak Ridge. Install a capacitor bank at New Bohemia. Upgrade 230/34.5 kV transformer #3 at Kings Fork	Dominion (100%)
b1325	Rebuild 15 miles of line #2020 Winfall – Elizabeth City with a minimum 900 MVA rating	Dominion (100%)
b1326	Install a third 168 MVA 230/115 kV transformer at Kitty Hawk with a normally open 230 kV breaker and a low side 115 kV breaker	Dominion (100%)
b1327	Rebuild the 20 mile section of line #22 between Kerr Dam – Eatons Ferry substations	Dominion (100%)
b1328	Uprate the 3.63 mile line section between Possum and Dumfries substations, replace the 1600 amp wave trap at Possum Point	AEC (0.66%) / APS (3.59%) / DPL (0.91%) / Dominion (92.94%) / PECO (1.90%)
b1329	Install line-tie breakers at Sterling Park substation and BECO substation	Dominion (100%)
b1330	Install a five breaker ring bus at the expanded Dulles substation to accommodate the existing Dulles Arrangement and support the Metrorail	Dominion (100%)
b1331	Build a 230 kV line from Shawboro to Aydlett tap and connect Aydlett to the new line	Dominion (100%)
b1332	Build Cannon Branch to Nokesville 230 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1333	Advance n1728 (Replace Possum Point 230 kV breaker H9T237 with an 80 kA breaker)		Dominion (100%)
b1334	Advance n1748 (Replace Ox 230 kV breaker 22042 with a 63 kA breaker)		Dominion (100%)
b1335	Advance n1749 (Replace Ox 230 kV breaker 220T2603 with a 63 kA breaker)		Dominion (100%)
b1336	Advance n1750 (Replace Ox 230 kV breaker 24842 with a 63 kA breaker)		Dominion (100%)
b1337	Advance n1751 (Replace Ox 230 kV breaker 248T2013 with a 63 kA breaker)		Dominion (100%)
b1503.1	Loop Line #2095 in and out of Waxpool approximately 1.5 miles		Dominion (100%)
b1503.2	Construct a new 230kV line from Brambleton to BECO Substation of approximately 11 miles with approximately 10 miles utilizing the vacant side of existing Line #2095 structures		Dominion (100%)
b1503.3	Install a one 230 kV breaker, Future 230 kV ring-bus at Waxpool Substation		Dominion (100%)
b1503.4	The new Brambleton - BECO line will feed Shellhorn Substation load and Greenway TX's #2&3 load		Dominion (100%)

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**Virginia Electric and Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1506.1	At Gainesville Substation, create two 115 kV straight-buses with a normally open tie-breaker	Dominion (100%)
b1506.2	Upgrade Line 124 (radial from Loudoun) to a minimum continuous rating of 500 MVA and network it into the 115 kV bus feeding NOVEC's DP at Gainesville	Dominion (100%)
b1506.3	Install two additional 230 kV breakers in the ring at Gainesville (may require substation expansion) to accommodate conversion of NOVEC's Gainesville to Wheeler line	Dominion (100%)
b1506.4	Convert NOVEC's Gainesville-Wheeler line from 115 kV to 230 kV (will require Gainesville DP Upgrade replacement of three transformers total at Atlantic and Wheeler Substations)	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1507	Rebuild Mt Storm – Doubs 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (22.34%) / BGE (11.58%) / Dominion (52.51%) / PEPCO (13.57%)</p>
b1508.1	Build a 2nd 230 kV Line Harrisonburg to Endless Caverns	APS (37.05%) / Dominion (62.95%)
b1508.2	Install a 3rd 230-115 kV Tx at Endless Caverns	APS (37.05%) / Dominion (62.95%)
b1508.3	Upgrade a 115 kV shunt capacitor banks at Merck and Edinburg	APS (37.05%) / Dominion (62.95%)
b1536	Advance n1752 (Replace OX 230 breaker 24342 with an (63kA breaker)	Dominion (100%)
b1537	Advance n1753 (Replace OX 230 breaker 243T2097 with an 63kA breaker)	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1538	Replace Loudoun 230 kV breaker '29552'	Dominion (100%)
b1571	Replace Acca 115 kV breaker '6072' with 40 kA	Dominion (100%)
b1647	Upgrade the name plate rating at Morrisville 500kV breaker 'H1T573' with 50kA breaker	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> Dominion (100%)
b1648	Upgrade name plate rating at Morrisville 500kV breaker 'H2T545' with 50kA breaker	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1649	Replace Morrisville 500kV breaker 'H1T580' with 50kA breaker	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1650	Replace Morrisville 500kV breaker 'H2T569' with 50kA breaker	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1651	Replace Loudoun 230kV breaker '295T2030' with 63kA breaker	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1652	Replace Ox 230kV breaker '209742' with 63kA breaker	Dominion (100%)
b1653	Replace Clifton 230kV breaker '26582' with 63kA breaker	Dominion (100%)
b1654	Replace Clifton 230kV breaker '26682' with 63kA breaker	Dominion (100%)
b1655	Replace Clifton 230kV breaker '205182' with 63kA breaker	Dominion (100%)
b1656	Replace Clifton 230kV breaker '265T266' with 63kA breaker	Dominion (100%)
b1657	Replace Clifton 230kV breaker '2051T2063' with 63kA breaker	Dominion (100%)
b1694	Rebuild Loudoun - Brambleton 500 kV Rebuild Loudoun - Brambleton 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> APS (14.19%) / BGE (12.70%) / Dominion (58.79%) / PEPCO (14.32%)
b1696	Install a breaker and a half scheme with a minimum of eight 230 kV breakers for five existing lines at Idylwood 230 kV	AEC (0.46%) / APS (4.18%) / BGE (2.02%) / DPL (0.80%) / Dominion (88.45%) / JCPL (0.64%) / ME (0.50%) / NEPTUNE* (0.06%) / PECO (1.55%) / PEPCO (1.34%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1697	Build a 2nd Clark - Idylwood 230 kV line and install 230 kV gas-hybrid breakers at Clark	AEC (1.35%) / APS (15.65%) / BGE (10.53%) / DPL (2.59%) / Dominion (46.97%) / JCPL (2.36%) / ME (1.91%) / NEPTUNE* (0.23%) / PECO (4.48%) / PEPCO (11.23%) / PSEG (2.59%) / RE (0.11%)
b1698	Install a 2nd 500/230 kV transformer at Brambleton	APS (4.21%) / BGE (13.28%) / DPL (1.09%) / Dominion (59.38%) / PEPCO (22.04%)
b1698.1	Install a 500 kV breaker at Brambleton	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1698.6	Replace Brambleton 230 kV breaker '2094T2095'	Dominion (100%)
b1699	Reconfigure Line #203 to feed Edwards Ferry sub radial from Pleasant View 230 kV and install new breaker bay at Pleasant View Sub	Dominion (100%)
b1700	Install a 230/115 kV transformer at the new Liberty substation to relieve Gainesville Transformer #3	Dominion (100%)
b1701	Reconductor line #2104 (Fredericksburg - Cranes Corner 230 kV)	APS (8.66%) / BGE (10.95%) / Dominion (63.30%) / PEPCO (17.09%)
b1724	Install a 2nd 138/115 kV transformer at Edinburg	Dominion (100%)
b1728	Replace the 115/34.5 kV transformer #1 at Hickory with a 230/34.5 kV transformer	Dominion (100%)
b1729	Add 4 breaker ring bus at Burton 115 kV substation and construct a 115 kV line approximately 3.5 miles from Oakwood 115 kV substation to Burton 115 kV substation	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1730	Install a 230/115 kV transformer at a new Liberty substation	Dominion (100%)
b1731	Uprate or rebuild Four Rivers – Kings Dominion 115 kV line or Install capacitors or convert load from 115 kV system to 230 kV system	Dominion (100%)
b1790	Split Wharton 115 kV capacitor bank into two smaller units and add additional reactive support in area by correcting power factor at Pantego 115 kV DP and FivePoints 115 kV DP to minimum of 0.973	Dominion (100%)
b1791	Wreck and rebuild 2.1 mile section of Line #11 section between Gordonsville and Somerset	APS (5.83%) / BGE (6.25%) / Dominion (78.38%) / PEPCO (9.54%)
b1792	Rebuild line #33 Halifax to Chase City, 26 miles. Install 230 kV 4 breaker ring bus	Dominion (100%)
b1793	Wreck and rebuild remaining section of Line #22, 19.5 miles and replace two pole H frame construction built in 1930	Dominion (100%)
b1794	Split 230 kV Line #2056 (Hornertown - Rocky Mount) and double tap line to Battleboro Substation. Expand station, install a 230 kV 3 breaker ring bus and install a 230/115 kV transformer	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1795	Reconductor segment of Line #54 (Carolina to Woodland 115 kV) to a minimum of 300 MVA	Dominion (100%)
b1796	Install 115 kV 25 MVAR capacitor bank at Kitty Hawk Substation	Dominion (100%)
b1797	Wreck and rebuild 7 miles of the Dominion owned section of Cloverdale - Lexington 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> AEP (0.86%) / APS (41.66%) / ATSI (0.40%) / BGE (20.89%) / Dayton (0.14%) / DEOK (0.44%) / Dominion (0.95%) / EKPC (0.13%) / PEPCO (34.53%)
b1798	Build a 450 MVAR SVC and 300 MVAR switched shunt at Loudoun 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (88.62%) / PEPCO (11.38%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1799	Build 150 MVAR Switched Shunt at Pleasant View 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (3.37%) / Dominion (95.01%) / ME (0.54%) / PEPCO (1.08%)</p>
b1805	Install a 250 MVAR SVC at the existing Mt. Storm 500kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  APS (62.13%) / PEPCO (37.87%)</p>
b1809	Replace Brambleton 230 kV Breaker '22702'	Dominion (100%)
b1810	Replace Brambleton 230 kV Breaker '227T2094'	Dominion (100%)

\* Neptune Regional Transmission System, LLC

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.1	Surry to Skiffes Creek 500 kV Line (7 miles overhead)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1905.2	Surry 500 kV Station Work	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.70%) / AEP (14.25%) /  APS (5.53%) / ATSI (8.09%) /  BGE (4.19%) / ComEd (13.43%) /  Dayton (2.12%) / DEOK (3.37%) /  DL (1.77%) / DPL (2.62%) /  Dominion (12.39%) / EKPC  (1.82%) / HTP*** (0.20%) / JCPL  (3.78%) / ME (1.87%) /  NEPTUNE* (0.42%) / PECO  (5.30%) / PENELEC (1.84%) /  PEPCO (4.18%) / PPL (4.46%) /  PSEG (6.22%) / RE (0.25%) /  ECP** (0.20%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1905.3	Skiffes Creek 500-230 kV Tx and Switching Station	Dominion (99.84%) / PEPCO (0.16%)
b1905.4	New Skiffes Creek - Whealton 230 kV line	Dominion (99.84%) / PEPCO (0.16%)
b1905.5	Whealton 230 kV breakers	Dominion (99.84%) / PEPCO (0.16%)

\* Neptune Regional Transmission System, LLC

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.6	Yorktown 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.7	Lanexa 115 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.8	Surry 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.9	Kings Mill, Peninmen, Toano, Waller, Warwick	Dominion (99.84%) / PEPCO (0.16%)
b1906.1	At Yadkin 500 kV, install six 500 kV breakers	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%)
		<b>DFAX Allocation:</b> Dominion (100%)
b1906.2	Install a 2nd 230/115 kV TX at Yadkin	Dominion (100%)
b1906.3	Install a 2nd 230/115 kV TX at Chesapeake	Dominion (100%)
b1906.4	Uprate Yadkin – Chesapeake 115 kV	Dominion (100%)
b1906.5	Install a third 500/230 kV TX at Yadkin	Dominion (100%)
b1907	Install a 3rd 500/230 kV TX at Clover	APS (5.83%) / BGE (4.74%) / Dominion (81.79%) / PEPCO (7.64%)

\* Neptune Regional Transmission System, LLC

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1908	Rebuild Lexington – Dooms 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.70%) / AEP (14.25%) / APS (5.53%) / ATSI (8.09%) / BGE (4.19%) / ComEd (13.43%) / Dayton (2.12%) / DEOK (3.37%) / DL (1.77%) / DPL (2.62%) / Dominion (12.39%) / EKPC (1.82%) / HTP*** (0.20%) / JCPL (3.78%) / ME (1.87%) / NEPTUNE* (0.42%) / PECO (5.30%) / PENELEC (1.84%) / PEPCO (4.18%) / PPL (4.46%) / PSEG (6.22%) / RE (0.25%) / ECP** (0.20%) <b>DFAX Allocation:</b> DEOK (1.12%) / Dominion (85.91%) / EKPC (0.33%) / PEPCO (12.64%)
b1909	Uprate Brems – Midlothian 230 kV to its maximum operating temperature	APS (6.31%) / BGE (3.81%) / Dominion (81.90%) / PEPCO (7.98%)
b1910	Build a Suffolk – Yadkin 230 kV line (14 miles) and install 4 breakers	Dominion (100%)
b1911	Add a second Valley 500/230 kV TX	APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)
b1912	Install a 500 MVAR SVC at Landstown 230 kV	DEOK (0.46%) / Dominion (99.54%)
b2053	Rebuild 28 mile line	AEP (100%)
b2125	Install four additional 230 kV 100 MVAR variable shunt reactor banks at Clifton, Gallows Road, Garrisonville, and Virginia Hills substations	Dominion (100%)
b2126	Install two additional 230 kV 100 MVAR variable shunt reactor banks at Churchland and Shawboro substations	Dominion (100%)

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\*\* East Coast Power, L.L.C.

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2181	Add a motor to an existing switch at Prince George to allow for Sectionalizing scheme for line #2124 and allow for Brickhouse DP to be re-energized from the 115 kV source	Dominion (100%)
b2182	Install 230kV 4-breaker ring at Enterprise 230 kV to isolate load from transmission system when substation initially built	Dominion (100%)
b2183	Add a motor to an existing switch at Keene Mill to allow for a sectionalizing scheme	Dominion (100%)
b2184	Install a 230 kV breaker at Tarboro to split line #229. Each will feed an autotransformer at Tarboro. Install switches on each autotransformer	Dominion (100%)
b2185	Uprate Line #69 segment Reams DP to Purdy (19 miles) from 41 MVA to 162 MVA by replacing 5 structures and re-sagging the line from 50C to 75C	Dominion (100%)
b2186	Install a 2nd 230-115kV transformer at Earleys connected to the existing 115kV and 230kV ring busses. Add a 115 kV breaker and 230kV breaker to the ring busses	Dominion (100%)
b2187	Install 4 - 230kV breakers at Shellhorn 230 kV to isolate load	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

Schedule 12 – Appendix  
Versions Effective January 1, 2018 - 2018 Annual Update  
(Clean Format)

## SCHEDULE 12 – APPENDIX

### (1) Atlantic City Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0135	Build new Cumberland – Dennis 230 kV circuit which replaces existing Cumberland – Corson 138 kV	AEC (100%)
b0136	Install Dennis 230/138 kV transformer, Dennis 150 MVAR SVC and 50 MVAR capacitor	AEC (100%)
b0137	Build new Dennis – Corson 138 kV circuit	AEC (100%)
b0138	Install Cardiff 230/138 kV transformer and a 50 MVAR capacitor at Cardiff	AEC (100%)
b0139	Build new Cardiff – Lewis 138 kV circuit	AEC (100%)
b0140	Reconductor Laurel – Woodstown 69 kV	AEC (100%)
b0141	Reconductor Monroe – North Central 69 kV	AEC (100%)
b0265	Upgrade AE portion of Delco Tap – Mickleton 230 kV circuit	AEC (89.87%) / JCPL (9.48%) / Neptune* (0.65%)
b0276	Replace both Monroe 230/69 kV transformers	AEC (91.46%) / PSEG (8.31%) / RE (0.23%)
b0276.1	Upgrade a strand bus at Monroe to increase the rating of transformer #2	AEC (100%)
b0277	Install a second Cumberland 230/138 kV transformer	AEC (100%)
b0281.1	Install 35 MVAR capacitor at Lake Ave 69 kV substation	AEC (100%)

## Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0281.2	Install 15 MVAR capacitor at Shipbottom 69 kV substation	AEC (100%)
b0281.3	Install 8 MVAR capacitors on the AE distribution system	AEC (100%)
b0142	Reconductor Landis – Minotola 138 kV	AEC (100%)
b0143	Reconductor Beckett – Paulsboro 69 kV	AEC (100%)
b0210	Install a new 500/230kV substation in AEC area. The high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (63.29%) / JCPL (36.71%)
b0210.1	Orchard – Cumberland – Install second 230 kV line	AEC (65.23%) / JCPL (25.87%) / Neptune * (2.55%) / PSEG (6.35%)††
b0210.2	Install a new 500/230kV substation in AEC area, the high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)††

\* Neptune Regional Transmission System, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.

### Atlantic City Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0211	Reconductor Union - Corson 138kV circuit		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0212	Substation upgrades at Union and Corson 138kV		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0214	Install 50 MVAR capacitor at Cardiff 230kV substation		AEC (100%)
b0431	Monroe Upgrade New Freedom strand bus		AEC (100%)
b0576	Move the Monroe 230/69 kV to Mickleton		AEC (100%)
b0744	Upgrade a strand bus at Mill 138 kV		AEC (100%)
b0871	Install 35 MVAR capacitor at Motts Farm 69 kV		AEC (100%)
b1072	Modify the existing EMS load shedding scheme at Cedar to additionally sense the loss of both Cedar 230/69 kV transformers and shed load accordingly		AEC (100%)
b1127	Build a new Lincoln-Minitola 138 kV line		AEC (100%)
b1195.1	Upgrade the Corson sub T2 terminal		AEC (100%)
b1195.2	Upgrade the Corson sub T1 terminal		AEC (100%)

### Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1244	Install 10 MVAR capacitor at Peermont 69 kV substation	AEC (100%)
b1245	Rebuild the Newport-South Millville 69 kV line	AEC (100%)
b1250	Reconductor the Monroe – Glassboro 69 kV	AEC (100%)
b1250.1	Upgrade substation equipment at Glassboro	AEC (100%)
b1280	Sherman: Upgrade 138/69 kV transformers	AEC (100%)
b1396	Replace Lewis 138 kV breaker ‘L’	AEC (100%)
b1398.5	Reconductor the existing Mickleton – Goucestr 230 kV circuit (AE portion)	JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1598	Reconductor Sherman Av – Carl’s Corner 69kV circuit	AEC (100%)
b1599	Replace terminal equipments at Central North 69 kV substation	AEC (100%)
b1600	Upgrade the Mill T2 138/69 kV transformer	AEC (89.21%) / JCPL (4.76%) / PSEG (5.80%) / RE (0.23%)
b2157	Re-build 5.3 miles of the Corson - Tuckahoe 69 kV circuit	AEC (100%)

\* Neptune Regional Transmission System, LLC

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-1.



## SCHEDULE 12 – APPENDIX

### (3) Delmarva Power & Light Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0144.1	Build new Red Lion – Milford – Indian River 230 kV circuit	DPL (100%)
b0144.2	Indian River Sub – 230 kV Terminal Position	DPL (100%)
b0144.3	Red Lion Sub – 230 kV Terminal Position	DPL (100%)
b0144.4	Milford Sub – (2) 230 kV Terminal Positions	DPL (100%)
b0144.5	Indian River – 138 kV Transmission Line to AT-20	DPL (100%)
b0144.6	Indian River – 138 & 69 kV Transmission Ckts. Undergrounding	DPL (100%)
b0144.7	Indian River – (2) 230 kV bus ties	DPL (100%)
b0148	Re-rate Glasgow – Mt. Pleasant 138 kV and North Seaford – South Harrington 138 kV	DPL (100%)
b0149	Complete structure work to increase rating of Cheswold – Jones REA 138 kV	DPL (100%)
b0221	Replace disconnect switch on Edgewood-N. Salisbury 69 kV	DPL (100%)
b0241.1	Keeny Sub – Replace overstressed breakers	DPL (100%)
b0241.2	Edgemoor Sub – Replace overstressed breakers	DPL (100%)
b0241.3	Red Lion Sub – Substation reconfigure to provide for second Red Lion 500/230 kV transformer	DPL (84.5%) / PECO (15.5%)
b0261	Replace 1200 Amp disconnect switch on the Red Lion – Reybold 138 kV circuit	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0262	Reconductor 0.5 miles of Christiana – Edgemoor 138 kV		DPL (100%)
b0263	Replace 1200 Amp wavetrap at Indian River on the Indian River – Frankford 138 kV line		DPL (100%)
b0272.1	Replace line trap and disconnect switch at Keeney 500 kV substation – 5025 Line Terminal Upgrade		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (27.55%) / BGE (0.25%) / DPL (44.42%) / PECO (27.29%) / PEPCO (0.24%) / PPL (0.25%)</p>
b0282	Install 46 MVAR capacitors on the DPL distribution system		DPL (100%)
b0291	Replace 1600A disconnect switch at Harmony 230 kV and for the Harmony – Edgemoor 230 kV circuit, increase the operating temperature of the conductor		DPL (100%)
b0295	Raise conductor temperature of North Seaford – Pine Street – Dupont Seaford		DPL (100%)

\*Neptune Regional Transmission System, LLC

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0296	Rehoboth/Cedar Neck Tap (6733-2) upgrade		DPL (100%)
b0320	Create a new 230 kV station that splits the 2 <sup>nd</sup> Milford to Indian River 230 kV line, add a 230/69 kV transformer, and run a new 69 kV line down to Harbeson 69 kV		DPL (100%)
b0382	Cambridge Sub – Close through to Todd Substation		DPL (100%)
b0383	Wye Mills AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0384	Replace Indian River AT-20 (400 MVA)		DPL (100%)
b0385	Oak Hall to New Church (13765) Upgrade		DPL (100%)
b0386	Cheswold/Kent (6768) Rebuild		DPL (100%)
b0387	N. Seaford – Add a 2 <sup>nd</sup> 138/69 kV autotransformer		DPL (100%)
b0388	Hallwood/Parksley (6790-2) Upgrade		DPL (100%)
b0389	Indian River AT-1 and AT-2 138/69 kV Replacements		DPL (100%)
b0390	Rehoboth/Lewes (6751-1 and 6751-2) Upgrade		DPL (100%)
b0391	Kent/New Meredith (6704-2) Upgrade		DPL (100%)
b0392	East New Market Sub – Establish a 69 kV Bus Arrangement		DPL (100%)
b0415	Increase the temperature ratings of the Edgemoor – Christiana – New Castle 138 kV by replacing six transmission poles		DPL (100%)

### Delmarva Power & Light Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0437	Spare Keeney 500/230 kV transformer		DPL (100%)
b0441	Additional spare Keeney 500/230 kV transformer		DPL (100%)
b0480	Rebuild Lank – Five Points 69 kV		DPL (100%)
b0481	Replace wave trap at Indian River 138 kV on the Omar – Indian River 138 kV circuit		DPL (100%)
b0482	Rebuild Millsboro – Zoar REA 69 kV		DPL (100%)
b0483	Replace Church 138/69 kV transformer and add two breakers		DPL (100%)
b0483.1	Build Oak Hall – Wattsville 138 kV line		DPL (100%)
b0483.2	Add 138/69 kV transformer at Wattsville		DPL (100%)
b0483.3	Establish 138 kV bus position at Oak Hall		DPL (100%)
b0484	Re-tension Worcester – Berlin 69 kV for 125°C		DPL (100%)
b0485	Re-tension Taylor – North Seaford 69 kV for 125°C		DPL (100%)
b0494.1	Install a 2 <sup>nd</sup> Red Lion 230/138 kV		DPL (100%)
b0494.2	Hares Corner – Relay Improvement		DPL (100%)
b0494.3	Reybold – Relay Improvement		DPL (100%)
b0494.4	New Castle – Relay Improvement		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</p>
b0513	Rebuild the Ocean Bay – Maridel 69 kV line	DPL (100%)
b0527	Replace existing 12 MVAR capacitor at Bethany with a 30 MVAR capacitor	DPL (100%)
b0528	Replace existing 69/12 kV transformer at Bethany with a 138/12 kV transformer	DPL (100%)
b0529	Install an additional 8.4 MVAR capacitor at Grasonville 69 Kv	DPL (100%)
b0530	Replace existing 12 MVAR capacitor at Wye Mills with a 30 MVAR capacitor	DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0531	Create a four breaker 138 kV ring bus at Wye Mills and add a second 138/69 kV transformer		DPL (100%)
b0566	Rebuild the Trappe Tap – Todd 69 kV line		DPL (100%)
b0567	Rebuild the Mt. Pleasant – Townsend 138 kV line		DPL (100%)
b0568	Install a third Indian River 230/138 kV transformer		DPL (100%)
b0725	Add a third Steele 230/138 kV transformer		DPL (100%)
b0732	Rebuild Vaugh – Wells 69 kV		DPL (100%)
b0733	Add a second 230/138 kV transformer at Harmony		DPL (97.06%) / PECO (2.94%)
b0734	Rebuild Church – Steele 138 kV		DPL (100%)
b0735	Rebuild Indian River – Omar – Bethany 138 kV		DPL (100%)
b0736	Rebuild Dupont Edgemoor – Edgemoor – Silverside 69 kV		DPL (69.65%) / PECO (17.30%) / PSEG (12.56%) / RE (0.49%)
b0737	Build a new Indian River – Bishop 138 kV line		DPL (100%)
b0750	Convert 138 kV network path from Vienna – Loretto – Piney - Grove to 230 kV, add 230/138 kV transformer to Loretto 230 kV		DPL (100%)

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0751	Add two additional breakers at Keeney 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> DPL (100%)
b0752	Replace two circuit breakers to bring the emergency rating up to 348 MVA	DPL (100%)
b0753	Add a second Loretto 230/138 kV transformer	DPL (100%)
b0754	Rebuild 10 miles of Glasgow to Mt. Pleasant 138 kV line to bring the normal rating to 298 MVA and the emergency rating to 333 MVA	DPL (100%)
b0792	Reconfigure Cecil Sub into 230 and 138 kV ring buses, add a 230/138 kV transformer, and operate the 34.5 kV bus normally open	DPL (100%)
b0873	Build 2nd Glasgow-Mt Pleasant 138 kV line	DPL (100%)
b0874	Reconfigure Brandywine substation	DPL (100%)

\*Neptune Regional Transmission System, LLC

## Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0876	Install 50 MVAR SVC at 138th St 138 kV	DPL (100%)
b0877	Build a 2nd Vienna-Steele 230 kV line	DPL (100%)
b0879.1	Apply a special protection scheme (load drop at Stevensville and Grasonville)	DPL (100%)
b1246	Re-build the Townsend – Church 138 kV circuit	DPL (100%)
b1247	Re-build the Glasgow – Cecil 138 kV circuit	DPL (72.06%) / PECO (27.94%)
b1248	Install two 15 MVAR capacitor at Loretto 69 kV	DPL (100%)
b1249	Reconfigure the existing Sussex 69 kV capacitor	DPL (100%)
b1603	Upgrade 19 miles conductor of the Wattsville - Signepost - Stockton - Kenney 69 kV circuit	DPL (100%)
b1604	Replace CT at Reybold 138 kV substation	DPL (100%)
b1723	Replace strand bus and disconnect switch at Glasgow 138 kV substation	DPL (100%)
b1899.1	Install new variable reactors at Indian River and Nelson 138 kV	DPL (100%)

\* Neptune Regional Transmission System, LLC

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-3.



**Delmarva Power & Light Company (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1899.2	Install new variable reactors at Cedar Creek 230 kV		DPL (100%)
b1899.3	Install new variable reactors at New Castle 138 kV and Easton 69 kV		DPL (100%)

## SCHEDULE 12 – APPENDIX

### (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0215	Install 230Kv series reactor and 2- 100MVAR PLC switched capacitors at Hunterstown		AEC (6.75%) / APS (4.00%) / DPL (9.16%) / JCPL (16.96%) / ME (10.60%) / Neptune* (1.70%) / PECO (19.12%) / PPL (8.55%) / PSEG (22.82%) / RE (0.34%)
b0404.1	Replace South Reading 230 kV breaker 107252		ME (100%)
b0404.2	Replace South Reading 230 kV breaker 100652		ME (100%)
b0575.1	Rebuild Hunterstown – Texas Eastern Tap 115 kV		ME (100%)
b0575.2	Rebuild Texas Eastern Tap – Gardners 115 kV and associated upgrades at Gardners including disconnect switches		ME (100%)
b0650	Reconductor Jackson – JE Baker – Taxville 115 kV line		ME (100%)
b0652	Install bus tie circuit breaker on Yorkana 115 kV bus and expand the Yorkana 230 kV ring bus by one breaker so that the Yorkana 230/115 kV banks 1, 3, and 4 cannot be lost for either B-14 breaker fault or a 230 kV line or bank fault with a stuck breaker		ME (100%)

\* Neptune Regional Transmission System, LLC

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0653 Construct a 230 kV Bernville station by tapping the North Temple – North Lebanon 230 kV line. Install a 230/69 kV transformer at existing Bernville 69 kV station		ME (100%)
b1000 Replace Portland 115kV breaker '95312'		ME (100%)
b1001 Replace Portland 115kV breaker '92712'		ME (100%)
b1002 Replace Hunterstown 115 kV breaker '96392'		ME (100%)
b1003 Replace Hunterstown 115 kV breaker '96292'		ME (100%)
b1004 Replace Hunterstown 115 kV breaker '99192'		ME (100%)
b1061 Replace existing Yorkana 230/115 kV transformer banks 1 and 4 with a single, larger transformer similar to transformer bank #3		ME (100%)
b1061.1 Replace the Yorkana 115 kV breaker '97282'		ME (100%)
b1061.2 Replace the Yorkana 115 kV breaker 'B282'		ME (100%)
b1302 Replace the limiting bus conductor and wave trap at the Jackson 115 kV terminal of the Jackson – JE Baker Tap 115 kV line		ME (100%)
b1365 Reconductor the Middletown – Collins 115 kV (975) line 0.32 miles of 336 ACSR		ME (100%)

\* Neptune Regional Transmission System, LLC

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b1366	Reconductor the Collins – Cly – Newberry 115 kV (975) line 5 miles with 795 ACSR		ME (100%)
b1727	Reconductor 2.4 miles of existing 556 and 795 ACSR from Harley Davidson to Pleasureville 115 kV with 795 ACSS to raise the ratings		ME (100%)
b1800	Install a 500 MVAR SVC at the existing Hunterstown 500kV substation		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (0.01%) / DPL (55.56%) / ME (44.42%) / PSEG (0.01%)</p>
b1801	Build a 250 MVAR SVC at Altoona 230 kV		AEC (6.48%) / AEP (2.58%) / APS (6.89%) / BGE (6.58%) / DPL (12.40%) / Dominion (14.90%) / JCPL (8.15%) / ME (6.21%) / Neptune* (0.82%) / PECO (21.58%) / PPL (4.89%) / PSEG (8.19%) / RE (0.33%)

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1816.5	Replace SCCIR (Sub-conductor) at Hunterstown Substation on the No. 1, 230/115 kV transformer	ME (100%)
b1999	Replace limiting wave trap, circuit breaker, substation conductor, relay and current transformer components at Northwood	ME (100%)
b2000	Replace limiting wave trap on the Glendon - Hosensack line	ME (100%)
b2001	Replace limiting circuit breaker and substation conductor transformer components at Portland 230kV	ME (100%)
b2002	Northwood 230/115 kV Transformer upgrade	ME (100%)
b2023	Construct a new North Temple - Riverview - Cartech 69 kV line (4.7 miles) with 795 ACSR	ME (100%)
b2024	Upgrade 4/0 substation conductors at Middletown 69 kV	ME (100%)
b2025	Upgrade 4/0 and 350 Cu substation conductors at the Middletown Junction terminal of the Middletown Junction - Wood Street Tap 69 kV line	ME (100%)
b2026	Upgrade an OC protection relay at the Baldy 69 kV substation	ME (100%)
b2148	Install a 115 kV 28.8 MVAR capacitor at Pleasureville substation	ME (100%)

**(5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2149 Upgrade substation riser on the Smith St. - York Inc. 115 kV line		ME (100%)
b2150 Upgrade York Haven structure 115 kV bus conductor on Middletown Jct. - Zions View 115 kV		ME (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## SCHEDULE 12 – APPENDIX

### (7) Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.1 Build 500 kV substation in PENELEC – Tap the Keystone – Juniata and Conemaugh – Juniata 500 kV, connect the circuits with a breaker and half scheme, and install new 400 MVAR capacitor		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0284.3 Replace wave trap and upgrade a bus section at Keystone 500 kV – on the Keystone – Airydale 500 kV		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0285.1	Replace wave trap at Keystone 500 kV – on the Keystone – Conemaugh 500 kV	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0285.2	Replace wave trap and relay at Conemaugh 500 kV – on the Conemaugh – Keystone 500 kV	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

\* Neptune Regional Transmission System, LLC



**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0349	Upgrade Rolling Meadows-Gore Jct 115 kV	PENELEC (100%)
b0360	Construction of a ring bus on the 345 kV side of Wayne substation	PENELEC (100%)
b0365	Add a 50 MVAR, 230 kV cap bank at Altoona 230 kV	PENELEC (100%)
b0369	Install 100 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0370	Install 500 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0376	Install 300 MVAR capacitor at Conemaugh 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (5.35%) / BGE (19.46%) / DL (0.25%) / JCPL (19.57%) / ME (6.75%) / NEPTUNE (2.17%) / PECO (20.81%) / PSEG (24.65%) / RE (0.99%)</p>
b0442	Spare Keystone 500/230 kV transformer	PENELEC (100%)
b0515	Replace Lewistown circuit breaker 1LY Yeagertown	PENELEC (100%)
b0516	Replace Lewistown circuit breaker 2LY Yeagertown	PENELEC (100%)
b0517	Replace Shawville bus section circuit breaker	PENELEC (100%)
b0518	Replace Homer City circuit breaker 201 Johnstown	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0519	Replace Keystone circuit breaker 4 Transformer - 20	PENELEC (100%)
b0549	Install 250 MVAR capacitor at Keystone 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (5.39%) / BGE (23.28%) / JCPL (17.99%) / ME (7.64%) / NEPTUNE (1.99%) / PECO (20.77%) / PSEG (22.05%) / RE (0.89%)</p>
b0550	Install 25 MVAR capacitor at Lewis Run 115 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0551	Install 25 MVAR capacitor at Saxton 115 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0552	Install 50 MVAR capacitor at Altoona 230 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0553	Install 50 MVAR capacitor at Raystown 230 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0555	Install 100 MVAR capacitor at Johnstown 230 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0556	Install 50 MVAR capacitor at Grover 230 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0557	Install 75 MVAR capacitor at East Towanda 230 kV substation	AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0563	Install 25 MVAR capacitor at Farmers Valley 115 kV substation	PENELEC (100%)
b0564	Install 10 MVAR capacitor at Ridgeway 115 kV substation	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0654	Reconfigure the Cambria Slope 115 kV and Wilmore Junction 115 kV stations to eliminate Wilmore Junction 115 kV 3-terminal line	PENELEC (100%)
b0655	Reconfigure and expand the Glade 230 kV ring bus to eliminate the Glade Tap 230 kV 3-terminal line	PENELEC (100%)
b0656	Add three breakers to form a ring bus at Altoona 230 kV	PENELEC (100%)
b0794	Upgrade the Homer City 230 kV breaker 'Pierce Road'	PENELEC (100%)
b1005	Replace Glory 115 kV breaker '#7 XFMR'	PENELEC (100%)
b1006	Replace Shawville 115 kV breaker 'NO.14 XFMR'	PENELEC (100%)
b1007	Replace Shawville 115 kV breaker 'NO.15 XFMR'	PENELEC (100%)
b1008	Replace Shawville 115 kV breaker '#1B XFMR'	PENELEC (100%)
b1009	Replace Shawville 115 kV breaker '#2B XFMR'	PENELEC (100%)
b1010	Replace Shawville 115 kV breaker 'Dubois'	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1011	Replace Shawville 115 kV breaker 'Philipsburg'	PENELEC (100%)
b1012	Replace Shawville 115 kV breaker 'Garman'	PENELEC (100%)
b1059	Replace a CRS relay at Hooversville 115 kV station	PENELEC (100%)
b1060	Replace a CRS relay at Rachel Hill 115 kV station	PENELEC (100%)
b1153	Upgrade Conemaugh 500/230 kV transformer and add a new line from Conemaugh-Seward 230 kV	AEC (3.86%) / APS (6.45%) / BGE (17.33%) / DL (0.33%) / JCPL (12.95%) / ME (7.10%) / PECO (11.88%) / PEPSCO (0.57%) / PPL (15.89%) / PSEG (21.15%) / RE (0.74%) / NEPTUNE* (1.75%)
b1153.1	Revise the reclosing on the Shelocta 115 kV breaker 'Lucerne'	PENELEC (100%)
b1169	Replace Shawville 115 kV breaker '#1A XFMR'	PENELEC (100%)
b1170	Replace Shawville 115 kV breaker '#2A XFMR'	PENELEC (100%)
b1277	Build a new Osterburg East – Bedford North 115 kV Line, 5.7 miles of 795 ACSR	PENELEC (100%)
b1278	Install 25 MVAR Capacitor Bank at Somerset 115 kV	PENELEC (100%)

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1367	Replace the Cambria Slope 115/46 kV 50 MVA transformer with 75 MVA	PENELEC (100%)
b1368	Replace the Claysburg 115/46 kV 30 MVA transformer with 75 MVA	PENELEC (100%)
b1369	Replace the 4/0 CU substation conductor with 795 ACSR on the Westfall S21 Tap 46 kV line	PENELEC (100%)
b1370	Install a 3rd 115/46 kV transformer at Westfall	PENELEC (100%)
b1371	Reconductor 2.6 miles of the Claysburg – HCR 46 kV line with 636 ACSR	PENELEC (100%)
b1372	Replace 4/0 CU substation conductor with 795 ACSR on the Hollidaysburg – HCR 46 kV	PENELEC (100%)
b1373	Re-configure the Erie West 345 kV substation, add a new circuit breaker and relocate the Ashtabula line exit	PENELEC (100%)
b1374	Replace wave traps at Raritan River and Deep Run 115 kV substations with higher rated equipment for both B2 and C3 circuits	PENELEC (100%)
b1535	Reconductor 0.8 miles of the Gore Junction – ESG Tap 115 kV line with 795 ACSR	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1607	Reconductor the New Baltimore - Bedford North 115 kV	PENELEC (100%)
b1608	Construct a new 345/115 kV substation and loop the Mansfield - Everts 115 kV	APS (8.61%) / PECO (1.72%) / PENELEC (89.67%)
b1609	Construct Four Mile Junction 230/115 kV substation. Loop the Erie South - Erie East 230 kV line, Buffalo Road - Corry East and Buffalo Road - Erie South 115 kV lines	APS (4.86%) / PENELEC (95.14%)
b1610	Install a new 230 kV breaker at Yeagertown	PENELEC (100%)
b1713	Install a 345 kV breaker at Erie West and relocate Ashtabula 345 kV line	PENELEC (100%)
b1769	Install a 75 MVAR cap bank on the Four Mile 230 kV bus	PENELEC (100%)
b1770	Install a 50 MVAR cap bank on the Buffalo Road 115 kV bus	PENELEC (100%)
b1802	Build a 100 MVAR Fast Switched Shunt and 200 MVAR Switched Shunt at Mansfield 345 kV	AEC (6.48%) / AEP (2.58%) / APS (6.89%) / BGE (6.58%) / DPL (12.40%) / Dominion (14.90%) / JCPL (8.15%) / ME (6.21%) / NEPTUNE* (0.82%) / PECO (21.58%) / PPL (4.89%) / PSEG (8.19%) / RE (0.33%)

\* Neptune Regional Transmission System, LLC



**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1821	Replace the Erie South 115 kV breaker 'Union City'	PENELEC (100%)
b1943	Construct a 115 kV ring bus at Claysburg Substation. Bedford North and Saxton lines will no longer share a common breaker	PENELEC (100%)
b1944	Reconductor Eclipse substation 115 kV bus with 1033 kcmil conductor	PENELEC (100%)
b1945	Install second 230/115 kV autotransformer at Johnstown	PENELEC (100%)
b1966	Replace the 1200 Amp Line trap at Lewistown on the Raystown-Lewistown 230 kV line and replace substation conductor at Lewistown	PENELEC (100%)
b1967	Replace the Blairsville 138/115 kV transformer	PENELEC (100%)
b1990	Install a 25 MVAR 115 kV Capacitor at Grandview	PENELEC (100%)
b1991	Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the Homer City-Stolle Road 345 kV line into Farmers Valley	PENELEC (100%)
b1992	Reconductor Cambria Slope-Summit 115kV with 795 ACSS Conductor	PENELEC (100%)

\* Neptune Regional Transmission System, LLC

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1993	Relocate the Erie South 345 kV line terminal	APS (10.19%) / JCPL (5.19%) / Neptune* (0.55%) / PENELEC (71.38%) / PSEG (12.21%) / RE (0.48%)
b1994	Convert Lewis Run-Farmers Valley to 230 kV using 1033.5 ACSR conductor. Project to be completed in conjunction with new Farmers Valley 345/230 kV transformation	APS (33.49%) / JCPL (8.72%) / ME (5.57%) / Neptune (0.87%) / PENELEC (37.14%) / PSEG (13.67%) / RE (0.54%)
b1995	Change CT Ratio at Claysburg	PENELEC (100%)
b1996.1	Replace 600 Amp Disconnect Switches on Ridgeway-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)
b1996.2	Reconductor Ridgeway and Whetstone 115 kV Bus	PENELEC (100%)
b1996.3	Replace Wave Trap at Ridgeway	PENELEC (100%)
b1996.4	Change CT Ratio at Ridgeway	PENELEC (100%)
b1997	Replace 600 Amp Disconnect Switches on Dubois-Harvey Run-Whetstone 115 kV line with 1200 Amp Disconnects	PENELEC (100%)

**Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville		PENELEC (100%)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

\* Neptune Regional Transmission System, LLC

## SCHEDULE 12 – APPENDIX

### (8) PECO Energy Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0171.1	Replace two 500 kV circuit breakers and two wave traps at Elroy substation to increase rating of Elroy - Hosensack 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> AEC (6.06%) / DPL (8.20%) / JCPL (21.17%) / PECO (64.56%) / PSEG (0.01%)
b0180	Replace Whitpain 230kV circuit breaker #165	PECO (100%)
b0181	Replace Whitpain 230kV circuit breaker #J105	PECO (100%)
b0182	Upgrade Plymouth Meeting 230kV circuit breaker #125	PECO (100%)
b0205	Install three 28.8Mvar capacitors at Planebrook 35kV substation	PECO (100%)
b0206	Install 161Mvar capacitor at Planebrook 230kV substation	AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)

\* Neptune Regional Transmission System, LLC

**PECO Energy Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0207	Install 161Mvar capacitor at Newlinville 230kV substation		AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)
b0208	Install 161Mvar capacitor Heaton 230kV substation		AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)
b0209	Install 2% series reactor at Chichester substation on the Chichester - Mickleton 230kV circuit		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0264	Upgrade Chichester – Delco Tap 230 kV and the PECO portion of the Delco Tap – Mickleton 230 kV circuit		AEC (89.87%) / JCPL (9.48%) / Neptune* (0.65%)
b0266	Replace two wave traps and ammeter at Peach Bottom, and two wave traps and ammeter at Newlinville 230 kV substations		PECO (100%)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)†
			<b>DFAX Allocation:</b> PECO (100%)

\* Neptune Regional Transmission System, LLC

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.1	Add a new 230 kV circuit between Whitpain and Heaton substations	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.2	Reconductor the Whitpain 1 – Plymtg 1 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.3	Convert the Heaton bus to a ring bus	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.4	Reconductor the Heaton – Warminster 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††
b0269.5	Reconductor Warminster – Buckingham 230 kV circuit	AEC (8.25%) / DPL (9.56%) / PECO (82.19%)††

\* Neptune Regional Transmission System, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269.6	Add a new 500 kV breaker at Whitpain between #3 transformer and 5029 line	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  PECO (100%)</p>
b0269.7	Replace North Wales 230 kV breaker #105	PECO (100%)
b0280.1	Install 161 MVAR capacitor at Warrington 230 kV substation	PECO 100%
b0280.2	Install 161 MVAR capacitor at Bradford 230 kV substation	PECO 100%
b0280.3	Install 28.8 MVAR capacitor at Warrington 34 kV substation	PECO 100%
b0280.4	Install 18 MVAR capacitor at Waverly 13.8 kV substation	PECO 100%

\* Neptune Regional Transmission System, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**PECO Energy Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0287	Install 600 MVAR Dynamic Reactive Device in Whitpain 500 kV vicinity		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> AEC (6.06%) / DPL (8.20%) / JCPL (21.17%) / PECO (64.56%) / PSEG (0.01%)
b0351	Reconductor Tunnel – Grays Ferry 230 kV		PECO (100%)
b0352	Reconductor Tunnel – Parrish 230 kV		PECO (100%)
b0353.1	Install 2% reactors on both lines from Eddystone – Llanerch 138 kV		PECO (100%)
b0353.2	Install identical second 230/138 kV transformer in parallel with existing 230/138 kV transformer at Plymouth Meeting		PECO 100%
b0353.3	Replace Whitpain 230 kV breaker 135		PECO (100%)
b0353.4	Replace Whitpain 230 kV breaker 145		PECO (100%)
b0354	Eddystone – Island Road Upgrade line terminal equipment		PECO 100%

\* Neptune Regional Transmission System, LLC

†† Cost allocations associated with below 500 kV elements of the project



**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0355	Reconductor Master – North Philadelphia 230 kV line	PECO 100%
b0357	Reconductor Buckingham – Pleasant Valley 230 kV	JCPL (37.89%) / Neptune* (4.55%) / PSEG (55.19%) / RE (2.37%)
b0359	Reconductor North Philadelphia – Waneeta 230 kV circuit	PECO 100%
b0402.1	Replace Whitpain 230 kV breaker #245	PECO (100%)
b0402.2	Replace Whitpain 230 kV breaker #255	PECO (100%)
b0438	Spare Whitpain 500/230 kV transformer	PECO (100%)
b0443	Spare Peach Bottom 500/230 kV transformer	PECO (100%)
b0505	Reconductor the North Wales – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) / PECO (83.66%)
b0506	Reconductor the North Wales – Hartman 230 kV circuit	AEC (8.58%) / DPL (7.76%) / PECO (83.66%)
b0507	Reconductor the Jarrett – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) PECO (83.66%)
b0508.1	Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit	PECO (100%)
b0509	Reconductor the Jarrett – Heaton 230 kV circuit	PECO (100%)

## PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0727	Rebuild Bryn Mawr – Plymouth Meeting 138 kV line	AEC (1.25%) / DPL (3.11%) / PECO (95.64%)
b0789	Reconductor the line to provide a normal rating of 677 MVA and an emergency rating of 827 MVA	AEC (0.73%) / JCPL (17.52%) / NEPTUNE* (1.72%) / PECO (44.88%) / PSEG (33.83%) / RE (1.32%)
b0790	Reconductor the Bradford – Planebrook 230 kV Ckt. 220-31 to provide a normal rating of 677 MVA and emergency rating of 827 MVA	JCPL (17.46%) / NEPTUNE* (1.71%) / PECO (45.51%) / PSEG (34.00%) / RE (1.32%)
b0829.1	Replace Whippain 230 kV breaker '155'	PECO (100%)
b1073	Install 2 new 230 kV breakers at Planebrook (on the 220-02 line terminal and on the 230 kV side of the #9 transformer)	PECO (100%)
b0829.2	Replace Whippain 230 kV breaker '525'	PECO (100%)
b0829.3	Replace Whippain 230 kV breaker '175'	PECO (100%)
b0829.4	Replace Plymouth Meeting 230 kV breaker '225'	PECO (100%)
b0829.5	Replace Plymouth Meeting 230 kV breaker '335'	PECO (100%)
b0841	Move the connection points for the 2nd Plymouth Meeting 230/138 kV XFMR	PECO (100%)

\* Neptune Regional Transmission System, LLC

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0842	Install a 2nd 230/138 kV XFMR and 35 MVAR CAP at Heaton 138 kV bus	PECO (100%)
b0842.1	Replace Heaton 138 kV breaker '150'	PECO (100%)
b0843	Install a 75 MVAR CAP at Llanerch 138 kV bus	PECO (100%)
b0844	Move the connection point for the Llanerch 138/69 kV XFMR	PECO (100%)
b0887	Replace Richmond-Tacony 69 kV line	PECO (100%)
b0920	Replace station cable at Whitpain and Jarrett substations on the Jarrett - Whitpain 230 kV circuit	PECO (100%)
b1014.1	Replace Circuit breaker, Station Cable, CTs and Wave Trap at Eddystone 230 kV	PECO (100%)
b1014.2	Replace Circuit breaker, Station Cable, CTs Disconnect Switch and Wave Trap at Island Rd. 230 kV	PECO (100%)
b1015	Replace Breakers #115 and #125 at Printz 230 kV substation	PECO (100%)
b1156.1	Upgrade at Richmond 230 kV breaker '525'	PECO (100%)
b1156.2	Upgrade at Richmond 230 kV breaker '415'	PECO (100%)
b1156.3	Upgrade at Richmond 230 kV breaker '475'	PECO (100%)
b1156.4	Upgrade at Richmond 230 kV breaker '575'	PECO (100%)

\* Neptune Regional Transmission System, LLC

**PECO Energy Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1156.5	Upgrade at Richmond 230 kV breaker '185'		PECO (100%)
b1156.6	Upgrade at Richmond 230 kV breaker '285'		PECO (100%)
b1156.7	Upgrade at Richmond 230 kV breaker '85'		PECO (100%)
b1156.8	Upgrade at Waneeta 230 kV breaker '425'		PECO (100%)
b1156.9	Upgrade at Emilie 230 kV breaker '815'		PECO (100%)
b1156.10	Upgrade at Plymouth Meeting 230 kV breaker '265'		PECO (100%)
b1156.11	Upgrade at Croydon 230 kV breaker '115'		PECO (100%)
b1156.12	Replace Emilie 138 kV breaker '190'		PECO (100%)
b1178	Add a second 230/138 kV transformer at Chichester. Add an inductor in series with the parallel transformers		JCPL (4.17%) / Neptune (0.44%) / PECO (82.73%) / PSEG (12.18%) / RE (0.48%)
b1179	Replace terminal equipment at Eddystone and Saville and replace underground section of the line		PECO (100%)
b1180.1	Replace terminal equipment at Chichester		PECO (100%)
b1180.2	Replace terminal equipment at Chichester		PECO (100%)
b1181	Install 230/138 kV transformer at Eddystone		PECO (100%)

\* Neptune Regional Transmission System, LLC

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1182	Reconductor Chichester – Saville 138 kV line and upgrade terminal equipment	JCPL (5.12%) / Neptune (0.54%) / PECO (79.46%) / PSEG (14.31%) / RE (0.57%)
b1183	Replace 230/69 kV transformer #6 at Cromby. Add two 50 MVAR 230 kV banks at Cromby	PECO (100%)
b1184	Add 138 kV breakers at Cromby, Perkiomen, and North Wales; add a 35 MVAR capacitor at Perkiomen 138 kV	PECO (100%)
b1185	Upgrade Eddystone 230 kV breaker #365	PECO (100%)
b1186	Upgrade Eddystone 230 kV breaker #785	PECO (100%)
b1197	Reconductor the PECO portion of the Burlington – Croydon circuit	PECO (100%)
b1198	Replace terminal equipments including station cable, disconnects and relay at Conowingo 230 kV station	PECO (100%)
b1338	Replace Printz 230 kV breaker ‘225’	PECO (100%)
b1339	Replace Printz 230 kV breaker ‘315’	PECO (100%)
b1340	Replace Printz 230 kV breaker ‘215’	PECO (100%)
b1398.6	Reconductor the Camden – Richmond 230 kV circuit (PECO portion) and upgrade terminal equipments at Camden substations	JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)

**PECO Energy Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.8	Reconductor Richmond – Waneeta 230 kV and replace terminal equipments at Richmond and Waneeta substations	JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.12	Replace Graysferry 230 kV breaker ‘115’	PECO (100%)
b1398.13	Upgrade Peach Bottom 500 kV breaker ‘225’	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)†
b1398.14	Replace Whitpain 230 kV breaker ‘105’	PECO (100%)
b1590.1	Upgrade the PECO portion of the Camden – Richmond 230 kV to a six wire conductor and replace terminal equipment at Richmond.	BGE (3.06%) / ME (0.83%) / PECO (91.70%) / PEPCO (1.94%) / PPL (2.47%)
b1591	Reconductor the underground portion of the Richmond – Waneeta 230 kV and replace terminal equipment	BGE (4.54%) / DL (0.27%) / ME (1.04%) / PECO (88.11%) / PEPCO (2.79%) / PPL (3.25%)

\* Neptune Regional Transmission System, LLC

**PECO Energy Company (cont.)**

Required Transmission Enhancements    Annual Revenue Requirement    Responsible Customer(s)

b1717	Install a second Waneeta 230/138 kV transformer on a separate bus section		PECO (100%)
b1718	Reconductor the Crescentville - Foxchase 138 kV circuit		PECO (100%)
b1719	Reconductor the Foxchase - Bluegrass 138 kV circuit		PECO (100%)
b1720	Increase the effective rating of the Eddystone 230/138 kV transformer by replacing a circuit breaker at Eddystone		PECO (100%)
b1721	Increase the rating of the Waneeta - Tuna 138 kV circuit by replacing two 138 kV CTs at Waneeta		PECO (100%)
b1722	Increase the normal rating of the Cedarbrook - Whitemarsh 69 kV circuit by changing the CT ratio and replacing station cable at Whitemarsh 69 kV		PECO (100%)
b1768	Install 39 MVAR capacitor at Cromby 138 kV bus		PECO (100%)
b1900	Add a 3rd 230 kV transmission line between Chichester and Linwood substations and remove the Linwood SPS		PECO (70.24%) / JCPL (6.07%) / ATSI (1.24%) / PSEG (21.01%) / RE (0.84%) / NEPTUNE* (0.60%)
b2140	Install a 3rd Emilie 230/138 kV transformer		PECO (100%)
b2145	Replace two sections of conductor inside Richmond substation		PECO (100%)

\* Neptune Regional Transmission System, LLC

## SCHEDULE 12 – APPENDIX

### (9) PPL Electric Utilities Corporation

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0074	Rebuild 12 miles of S. Akron – Berks 230 kV to double circuit, looping Met Ed's S. Lebanon – S. Reading line into Berks; replacement of S. Reading 230 kV breaker 107252	PPL (100%)
b0171.2	Replace wavetrap at Hosensack 500kV substation to increase rating of Elroy - Hosensack 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> AEC (6.06%) / DPL (8.20%) / JCPL (21.17%) / PECO (64.56%) / PSEG (0.01%)
b0172.1	Replace wave trap at Alburtis 500kV substation	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> AEC (5.32%) / JCPL (33.44%) / NEPTUNE (5.35%) / PSEG (53.73%) / RE (2.16%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC



**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.2	Replace two wave traps at Juniata 500 kV – on the two Juniata – Airydale 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (5.35%) / BGE (19.46%) / DL (0.25%) / JCPL (19.57%) / ME (6.75%) / NEPTUNE (2.17%) / PECO (20.81%) / PSEG (24.65%) / RE (0.99%)</p>
b0284.4	Changes at Juniata 500 kV substation	PPL (100%)
b0293.1	Replace wavetrap at the Martins Creek 230 kV bus	PPL (100%)
b0293.2	Raise the operating temperature of the 2-1590 ACSR to 140C for the Martins Creek – Portland 230 kV circuit	PPL (100%)
b0440	Spare Juniata 500/230 kV transformer	PPL (100%)
b0468	Build a new substation with two 150 MVA transformers between Dauphin and Hummelstown 230/69 kV substations by sectionalizing the Middletown Junction – New Lebanon 230 kV line	JCPL (4.56%) / Neptune* (0.37%) / PECO (1.79%) / PENELEC (0.33%) / PPL (86.79%) / PSEG (5.94%) / RE (0.22%)

\* Neptune Regional Transmission System, LLC

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0469	Install 130 MVAR capacitor at West Shore 230 kV line	PPL (100%)
b0487	Build new 500 kV transmission facilities from Susquehanna to Pennsylvania – New Jersey border at Bushkill	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> JCPL (33.89%) / NEPTUNE (4.26%) / PSEG (59.46%) / RE (2.39%)
b0487.1	Install Lackawanna 500/230 kV transformer and upgrade 230 kV substation and switchyard	PENELEC (16.93%) / PPL (77.74%) / PSEG (5.14%) / RE (0.19%)
b0500.1	Conastone – Otter Creek 230 kV – Reconductor approximately 17.2 miles of 795 kmil ACSR with new 795 kmil ACSS operated at 160 deg C	AEC (6.31%) / DPL (8.70%) / JCPL (14.62%) / ME (10.65%) / Neptune* (1.38%) / PECO (15.75%) / PPL (21.14%) / PSEG (20.68%) / RE (0.77%)

\*Neptune Regional Transmission System, LLC

The Annual Revenue Requirements associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-8G.

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0558	Install 250 MVAR capacitor at Juniata 500 kV substation	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0593	Eldred – Pine Grove 69 kV line Rebuild Part 2: 8 miles	PPL (100%)
b0595	Rebuild Lackawanna – Edella 69 kV line to double circuit	PPL (100%)
b0596	Reconductor and rebuild Stanton – Providence 69 kV #1 and #2 lines with 69 kV design; approximately 8 miles total	PPL (100%)
b0597	Reconductor Suburban – Providence 69 kV #1 and resectionalize the Suburban 69 kV lines	PPL (100%)
b0598	Reconductor Suburban Taps #1 and #2 for 69 kV line portions	PPL (100%)

\* Neptune Regional Transmission System, LLC

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0600	Tripp Park Substation: 69 kV tap off Stanton – Providence 69 kV line #3 to new substation		PPL (100%)
b0601	Jessup Substation: New 138/69 kV tap off of Peckville – Jackson 138/69 kV line		PPL (100%)
b0604	Add 150 MVA, 230/138/69 transformer #6 to Harwood substation		PPL (100%)
b0605	Reconductor Stanton – Old Forge 69 kV line and resectionalize the Jenkins – Scranton 69 kV #1 and #2 lines		PPL (100%)
b0606	New 138 kV tap off Monroe – Jackson 138 kV #1 line to Bartonsville substation		PPL (100%)
b0607	New 138 kV taps off Monroe – Jackson 138 kV lines to Stroudsburg substation		PPL (100%)
b0608	New 138 kV tap off Siegfried – Jackson 138 kV #2 to transformer #2 at Gilbert substation		PPL (100%)
b0610	At South Farmersville substation, a new 69 kV tap off Nazareth – Quarry #2 to transformer #2		PPL (100%)
b0612	Rebuild Siegfried – North Bethlehem portion (6.7 miles) of Siegfried – Quarry 69 kV line		PPL (100%)
b0613	East Tannersville Substation: New 138 kV tap to new substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0614	Elroy substation expansion and new Elroy – Hatfield 138/69 kV double circuit lines (1.9 miles)		PPL (100%)
b0615	Reconductor and rebuild 12 miles of Seidersville – Quakerstown 138/69 kV and a new 75 MVA, 230/69 kV transformer #4		PPL (100%)
b0616	New Springfield 230/69 kV substation and transmission line connections		PPL (100%)
b0620	New 138 kV line and terminal at Monroe 230/138 substation		PPL (100%)
b0621	New 138 kV line and terminal at Siegfried 230/138 kV substation and add a second circuit to Siegfried – Jackson for 8.0 miles		PPL (100%)
b0622	138 kV yard upgrades and transmission line rearrangements at Jackson 138/69 kV substation		PPL (100%)
b0623	New West Shore – Whitehill Taps 138/69 kV double circuit line (1.3 miles)		PPL (100%)
b0624	Reconductor Cumberland – Wertzville 69 kV portion (3.7 miles) of Cumberland – West Shore 69 kV line		PPL (100%)
b0625	Reconductor Mt. Allen – Rossmoyne 69 kV portions (1.6 miles) of West Shore – Cumberland #3 and #4 lines		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0627	Replace UG cable from Walnut substation to Center City Harrisburg substation for higher ampacity (0.25 miles)	PPL (100%)
b0629	Lincoln substation: 69 kV tap to convert to modified Twin A	PPL (100%)
b0630	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild from Landisville Tap – Mt. Joy (2 miles)	PPL (100%)
b0631	W. Hempfield – Donegal 69 kV line: Reconductor / rebuild to double circuit from Mt. Joy – Donegal (2 miles)	PPL (100%)
b0632	Terminate new S. Manheim – Donegal 69 kV circuit into S. Manheim 69 kV #3	PPL (100%)
b0634	Rebuild S. Manheim – Fuller 69 kV portion (1.0 mile) of S. Manheim – West Hempfield 69 kV #3 line into a 69 kV double circuit	PPL (100%)
b0635	Reconductor Fuller Tap – Landisville 69 kV (4.1 miles) into a 69 kV double circuit	PPL (100%)
b0703	Berks substation modification on Berks – South Akron 230 kV line. Modification will isolate the line fault on the South Akron line and will allow Berks transformer #2 to be energized by the South Lebanon 230 kV circuit	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0705	New Derry – Millville 69 kV line		PPL (100%)
b0707	Construct Bohemia – Twin Lakes 69 kV line, install a 10.9 MVAR capacitor bank near Bohemia 69 kV substation		PPL (100%)
b0708	New 69 kV double circuit from Jackson – Lake Naomi Tap		PPL (100%)
b0709	Install new 69 kV double circuit from Carlisle – West Carlisle		PPL (100%)
b0710	Install a third 69 kV line from Reese’s Tap to Hershey substation		PPL (100%)
b0711	New 69 kV that taps West Shore – Cumberland 69 kV #1 to Whitehill 69 kV substation		PPL (100%)
b0712	Construct a new 69 kV line between Strassburg Tap and the Millwood – Engleside 69 kV #1 line		PPL (100%)
b0713	Construct a new 138 kV double circuit line between Dillersville Tap and the West Hempfield – Prince 138 kV line		PPL (100%)
b0714	Prepare Roseville Tap for 138 kV conversion		PPL (100%)
b0715	Transfer S. Akron – S. Manheim #1 and #2 lines from the S. Akron 69 kV Yard to the S. Akron 138 kV Yard; Install switches on S. Akron – S. Manheim 138 kV #1 and #2 lines		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0716	Add a second 69 kV line from Morgantown – Twin Valley		PPL (100%)
b0717	Rebuild existing Brunner Island – West Shore 230 kV line and add a second Brunner Island – West Shore 230 kV line		PPL (100%)
b0718	SPS scheme to drop 190 MVA of 69 kV radial load at West Shore and 56 MVA of 69 kV radial load at Cumberland		PPL (100%)
b0719	SPS scheme at Jenkins substation to open the Stanton #1 and Stanton #2 230 kV circuit breakers after the second contingency		PPL (100%)
b0791	Add a fourth 230/69 kV transformer at Stanton		PENELEC (9.55%) / PPL (90.45%)
b1074	Install motor operators on the Jenkins 230 kV ‘2W’ disconnect switch and build out Jenkins Bay 3 and have MOD ‘3W’ operated as normally open		PPL (100%)
b0881	Install motor operators on Susquehanna T21 - Susquehanna 230 kV line East CB at Susquehanna 230 kV switching station		PPL (100%)
b0908	Install motor operators at South Akron 230 kV		PPL (100%)



**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0909	Convert Jenkins 230 kV yard into a 3-breaker ring bus		PPL (100%)
b0910	Install a second 230 kV line between Jenkins and Stanton		PPL (100%)
b0911	Install motor operators at Frackville 230 kV		PPL (100%)
b0912	Install 2, 10.8 MVAR capacitor banks at Scranton 69 kV		PPL (100%)
b0913	Extend Cando Tap to the Harwood-Jenkins #2 69 kV line		PPL (100%)
b0914	Build a 3rd 69 kV line from Harwood to Valmont Taps		PPL (100%)
b0915	Replace Walnut-Center City 69 kV cable		PPL (100%)
b0916	Reconductor Sunbury-Dalmatia 69 kV line		PPL (100%)
b1021	Install a new (#4) 138/69 kV transformer at Wescosville		PPL (100%)
b1196	Remove the Siegfried bus tie breaker and install a new breaker on the Martins Creek 230 kV line west bay to maintain two ties between the 230 kV buses		PPL (100%)
b1201	Rebuild the Hercules Tap to Double Circuit 69 kV		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1202	Mack-Macungie Double Tap, Single Feed Arrangement		PPL (100%)
b1203	Add the 2nd Circuit to the East Palmerton-Wagners-Lake Naomi 138/69 kV Tap		PPL (100%)
b1204	New Breinigsville 230-69 kV Substation		PPL (100%)
b1205	Siegfried-East Palmerton #1 69 kV Line- Install new 69 kV LSAB, Sectionalize, and Transfer Treichlers Substation		PPL (100%)
b1206	Siegfried-Quarry #1 & #2 69 kV Lines- Rebuild 3.3 mi from Quarry Substation to Macada Taps		PPL (100%)
b1209	Convert Neffsville Taps from 69 kV to 138 kV Operation		PPL (100%)
b1210	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 1 – operate on the 69 kV system)		PPL (100%)
b1211	Convert Roseville Taps from 69 kV to 138 kV Operation (Part 2 – operate on the 138 kV system)		PPL (100%)
b1212	New 138 kV Taps to Flory Mill 138/69 kV Substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1213	Convert East Petersburg Taps from 69 kV to 138 kV operation, install two 10.8 MVAR capacitor banks	PPL (100%)
b1214	Terminate South Manheim-Donegal #2 at South Manheim, Reduce South Manheim 69 kV Capacitor Bank, Resectionalize 69 kV	PPL (100%)
b1215	Reconductor and rebuild 16 miles of Peckville-Varden 69 kV line and 4 miles of Blooming Grove-Honesdale 69 kV line	PPL (100%)
b1216	Build approximately 2.5 miles of new 69 kV transmission line to provide a “double tap – single feed” connection to Kimbles 69/12 kV substation	PPL (100%)
b1217	Provide a “double tap – single feed” connection to Tafton 69/12 kV substation	PPL (100%)
b1524	Build a new Pocono 230/69 kV substation	PPL (100%)
b1524.1	Build approximately 14 miles new 230 kV South Pocono – North Pocono line	PPL (100%)
b1524.2	Install MOLSABs at Mt. Pocono substation	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1525	Build new West Pocono 230/69 kV Substation	PPL (100%)
b1525.1	Build approximately 14 miles new 230 kV Jenkins-West Pocono 230 kV Line	PPL (100%)
b1525.2	Install Jenkins 3E 230 kV circuit breaker	PPL (100%)
b1526	Install a new Honeybrook – Twin Valley 69/138 kV tie	PPL (100%)
b1527	Construct a new 230/69 kV North Lancaster substation. The sub will be supplied from the SAKR-BERK 230kV Line	PPL (100%)
b1527.1	Construct new 69/138 kV transmission from North Lancaster 230/69 kV sub to Brecknock and Honeybrook areas	PPL (100%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlerstown #1 & #2 69 kV lines at East Texas Substation	PPL (100%)
b1529	Add a double breaker 230 kV bay 3 at Hosensack	PPL (100%)
b1530	Replace Lock Haven 69kV ring bus with standard breaker and half design	PPL (100%)
b1532	Install new 32.4 MVAR capacitor bank at Sunbury	PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1533	Rebuild Lycoming-Lock Haven #1 and Lycoming-Lock Haven #2 69kV lines		PPL (100%)
b1534	Rebuild 1.4 miles of the Sunbury-Milton 69kV		PPL (100%)
b1601	Re-configure the Breinigsville 500 kV substation with addition two 500 kV circuit breakers		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)†
b1602	Re-configure the ElimSPORT 230 kV substation to breaker and half scheme and install 80 MVAR capacitor		PPL (100%)
b1740	Install a 90 MVAR cap bank on the Frackville 230 kV bus #207973		PPL (100%)
b1756	Install a 3rd West Shore 230/69 kV transformer		PPL (100%)
b1757	Install a 230 kV motor-operated air-break switch on the Clinton - ElimSPORT 230 kV line		PPL (100%)

\* Neptune Regional Transmission System, LLC

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1758	Rebuild 1.65 miles of Columbia - Danville 69 kV line		PPL (100%)
b1759	Install a 69 kV 16.2 MVAR Cap at Milton substation		PPL (100%)
b1760	Install motor operated devices on the existing disconnect switches that are located on each side of all four 230 kV CBs at Stanton		PPL (100%)
b1761	Build a new Paupack - North 230 kV line (Approximately 21 miles)		PPL (100%)
b1762	Replace 3.7 miles of the existing 230 kV Blooming Grove - Peckville line by building 8.4 miles of new 230 kV circuit onto the Lackawanna - Hopatcong tower-line		PPL (100%)
b1763	Re-terminate the Peckville - Jackson and the Peckville - Varden 69 kV lines from Peckville into Lackawanna		PPL (100%)
b1764	Build a new 230-69 kV substations (Paupack)		PPL (100%)
b1765	Install a 16.2 MVAR capacitor bank at Bohemia 69-12 kV substation		PPL (100%)
b1766	Reconductor/rebuild 3.3 miles of the Siegfried - Quarry #1 and #2 lines		PPL (100%)
b1767	Install 6 motor-operated disconnect switches at Quarry substation		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1788	Install a new 500 kV circuit breaker at Wescosville		PPL (100%)
b1890	Add a second 230/69 kV transformer at North Pocono (NE/Pocono Reliability Project)		PPL (100%)
b1891	Build a new 230/138 kV Yard at Lackawanna (138 kV conversion from Lackawanna to Jenkins)		PPL (100%)
b1892	Rebuild the Throop Taps for 138 kV operation (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1893	Swap the Staton - Old Forge and Stanton - Brookside 69 kV circuits at Stanton (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1894	Rebuild and re-conductor 2.5 miles of the Stanton - Avoca 69 kV line		PPL (100%)
b1895	Rebuild and re-conductor 4.9 miles of the Stanton - Providence #1 69 kV line		PPL (100%)
b1896	Install a second 230/138 kV transformer and expand the 138 kV yard at Monroe		PPL (100%)
b1897	Build a new 230/138 kV substation at Jenkins (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1898	Install a 69 kV Tie Line between Richfield and Dalmatia substations		PPL (100%)
b2004	Replace the CTs and switch in South Akron Bay 4 to increase the rating		PPL (100%)

**PPL Electric Utilities Corporation (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2005	Replace the CTs and switch in SAKR Bay 3 to increase the rating of the Millwood-South Akron 230 kV Line and of the rating in Bay 3	PPL (100%)
b2006	Install North Lancaster 500/230 kV substation (below 500 kV portion)	AEC (1.11%) / JCPL (9.68%) / ME (19.56%) / Neptune* (0.76%) / PECO (6.06%) / PPL (50.95%) / PSEG (11.43%) / RE (0.45%)
b2006.1	Install North Lancaster 500/230 kV substation (500 kV portion)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  PPL (100%)</p>
b2007	Install a 90 MVAR capacitor bank at the Frackville 230 kV Substation	PPL (100%)
b2158	Install 10.8 MVAR capacitor at West Carlisle 69/12 kV substation	PPL (100%)

\* Neptune Regional Transmission System, LLC



## SCHEDULE 12 – APPENDIX

### (10) Potomac Electric Power Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0146	Installation of (2) new 230 kV circuit breakers at Quince Orchard substation on circuits 23028 and 23029		PEPCO (100%)
b0219	Install two new 230 kV circuits between Palmers Corner and Blue Plains		PEPCO (100%)
b0228	Upgrade Burtonsville – Sandy Springs 230 kV circuit		PEPCO (100%)
b0238.1	Modify Dickerson Station H 230 kV		PEPCO (100%)
b0251	Install 100 MVAR of 230 kV capacitors at Bells Mill		PEPCO (100%)
b0252	Install 100 MVAR of 230 kV capacitors at Bells Mill		PEPCO (100%)
b0288	Brighton Substation – add 2 <sup>nd</sup> 1000 MVA 500/230 kV transformer, 2 500 kV circuit breakers and miscellaneous bus work		BGE (19.33%) / Dominion (17%) / PEPCO (63.67%)
b0319	Add a second 1000 MVA Bruches Hill 500/230 kV transformer		PEPCO (100%)
b0366	Install a 4 <sup>th</sup> Ritchie 230/69 kV transformer		PEPCO (100%)

\* Neptune Regional Transmission System, LLC

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.

## Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0367.1 Reconductor circuit “23035” for Dickerson – Quince Orchard 230 kV		AEC (1.78%) / BGE (26.54%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.80%) / PEPCO (52.50%) / PPL (3.23%) / PSEG (3.82%)
b0367.2 Reconductor circuit “23033” for Dickerson – Quince Orchard 230 kV		AEC (1.78%) / BGE (26.54%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.80%) / PEPCO (52.50%) / PPL (3.23%) / PSEG (3.82%)
b0375 Install 0.5% reactor at Dickerson on the Pleasant View – Dickerson 230 kV circuit		AEC (1.02%) / BGE (25.42%) / DPL (2.97%) / ME (1.72%) / PECO (3.47%) / PEPCO (65.40%)
b0467.1 Reconductor the Dickerson – Pleasant View 230 kV circuit		AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.54%) / PEPCO (41.86%) / PPL (2.07%)
b0478 Reconductor the four circuits from Burches Hill to Palmers Corner		APS (1.68%) / BGE (1.83%) / PEPCO (96.49%)
b0496 Replace existing 500/230 kV transformer at Brighton		APS (5.67%) / BGE (29.68%) / Dominion (10.91%) / PEPCO (53.74%)
b0499 Install third Burches Hill 500/230 kV transformer		APS (3.54%) / BGE (7.31%) / PEPCO (89.15%)

\*Neptune Regional Transmission System, LLC

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-9.

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</p>
b0512.7	Advance n0772 (Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</p>

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.8	Advance n0773 (Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)
b0512.9	Advance n0774 (Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.10	Advance n0775 (Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)
b0512.11	Advance n0776 (Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.12	Advance n0777 (Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)
b0512.13	Advance n0778 (Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.14	Advance n0779 (Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)
b0512.15	Advance n0780 (Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.16	Advance n0781 (Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</p>
b0512.17	Advance n0782 (Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.18	Advance n0783 (Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)
b0512.19	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.20	Advance n0785 (Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)
b0512.21	Advance n0786 (Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.22	Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)
b0512.23	Advance n0788 (Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.24	Advance n0789 (Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</p>
b0512.25	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)</p>

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**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.26	Advance n0791 (Replace Chalk Point 230 Kv breaker (4C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)
b0512.27	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)

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## Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.28	Advance n0793 (Replace Chalk Point 230 Kv breaker (6C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)
b0512.29	Advance n0794 (Replace Chalk Point 230 Kv breaker (7C) with 80 kA breaker)	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)
b0526	Build two Ritchie – Benning Station A 230 kV lines	AEC (0.77%) / BGE (16.76%) / DPL (1.22%) / JCPL (1.39%) / ME (0.59%) / Neptune* (0.13%) / PECO (2.10%) / PEPCO (74.86%) / PSEG (2.10%) / RE (0.08%)

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0561 Install 300 MVAR capacitor at Dickerson Station "D" 230 kV substation		AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0562 Install 500 MVAR capacitor at Brighton 230 kV substation		AEC (8.64%) / APS (1.70%) / DPL (12.33%) / JCPL (18.30%) / ME (1.56%) / Neptune* (1.78%) / PECO (21.94%) / PPL (6.45%) / PSEG (26.32%) / RE (0.98%)
b0637 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0638 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0639 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0640 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0641 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0642 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0643 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0644 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0645 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0646 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0647 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0648 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0649 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0701	Expand Benning 230 kV station, add a new 250 MVA 230/69 kV transformer at Benning Station 'A', new 115 kV Benning switching station	BGE (30.57%) / PEPCO (69.43%)
b0702	Add a second 50 MVAR 230 kV shunt reactor at the Benning 230 kV substation	PEPCO (100%)
b0720	Upgrade terminal equipment on both lines	PEPCO (100%)
b0721	Upgrade Oak Grove – Ritchie 23061 230 kV line	PEPCO (100%)
b0722	Upgrade Oak Grove – Ritchie 23058 230 kV line	PEPCO (100%)
b0723	Upgrade Oak Grove – Ritchie 23059 230 kV line	PEPCO (100%)
b0724	Upgrade Oak Grove – Ritchie 23060 230 kV line	PEPCO (100%)
b0730	Add slow oil circulation to the four Bells Mill Road – Bethesda 138 kV lines, add slow oil circulation to the two Buzzard Point – Southwest 138 kV lines; increasing the thermal ratings of these six lines allows for greater adjustment of the O Street phase shifters	PEPCO (100%)

\* Neptune Regional Transmission System, LLC



## Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0731	Implement an SPS to automatically shed load on the 34 kV Bells Mill Road bus for this N-2 condition. The SPS will be in effect for 2013 and 2014 until a third Bells Mill 230/34 kV is placed in-service in 2015	PEPCO (100%)
b0746	Upgrade circuit for 3,000 amps using the ACCR	AEC (0.73%) / BGE (31.05%) / DPL (1.45%) / PECO (2.46%) / PEPCO (62.88%) / PPL (1.43%)
b0747	Upgrade terminal equipment on both lines: Quince Orchard - Bells Mill 230 kV (030) and (028)	PEPCO (100%)
b0802	Advance n0259 (Replace Dickerson Station H Circuit Breaker 412A)	PEPCO (100%)
b0803	Advance n0260 (Replace Dickerson Station H Circuit Breaker 42A)	PEPCO (100%)
b0804	Advance n0261 (Replace Dickerson Station H Circuit Breaker 42C)	PEPCO (100%)
b0805	Advance n0262 (Replace Dickerson Station H Circuit Breaker 43A)	PEPCO (100%)
b0806	Advance n0264 (Replace Dickerson Station H Circuit Breaker 44A)	PEPCO (100%)

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0809 Advance n0267 (Replace Dickerson Station H Circuit Breaker 45B)		PEPCO (100%)
b0810 Advance n0270 (Replace Dickerson Station H Circuit Breaker 47A)		PEPCO (100%)
b0811 Advance n0726 (Replace Dickerson Station H Circuit Breaker SPARE )		PEPCO (100%)
b0845 Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker		PEPCO (100%)
b0846 Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker		PEPCO (100%)
b0847 Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker		PEPCO (100%)
b0848 Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker		PEPCO (100%)
b0849 Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker		PEPCO (100%)
b0850 Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker		PEPCO (100%)
b0851 Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker		PEPCO (100%)
b0852 Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker		PEPCO (100%)
b0853 Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker		PEPCO (100%)
b0854 Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker		PEPCO (100%)
b0855 Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker		PEPCO (100%)

**Potomac Electric Power Company (cont.)**

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0856	Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker		PEPCO (100%)
b0857	Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker		PEPCO (100%)
b0858	Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker		PEPCO (100%)
b0859	Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker		PEPCO (100%)
b0860	Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker		PEPCO (100%)
b0861	Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker		PEPCO (100%)
b0862	Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker		PEPCO (100%)
b0863	Replace Chalk Point 230 kV breaker (1C) with 80 kA breaker		PEPCO (100%)
b1104	Replace Burtonsville 230 kV breaker '1C'		PEPCO (100%)
b1105	Replace Burtonsville 230 kV breaker '2C'		PEPCO (100%)
b1106	Replace Burtonsville 230 kV breaker '3C'		PEPCO (100%)
b1107	Replace Burtonsville 230 kV breaker '4C'		PEPCO (100%)
b1125	Convert the 138 kV line from Buzzard 138 - Ritchie 851 to a 230 kV line and Remove 230/138 kV Transformer at Ritchie and install a spare 230/138 kV transformer at Buzzard Pt		APS (4.74%) / PEPCO (95.26%)
b1126	Upgrade the 230 kV line from Buzzard 016 – Ritchie 059		APS (4.74%) / PEPCO (95.26%)

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1592 Reconductor the Oak Grove – Bowie 230 kV circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.40%) / APS (3.83%) / BGE (65.87%) / DPL (4.44%) / JCPL (3.94%) / ME (2.16%) / Neptune* (0.39%) / PECO (8.37%) / PPL (2.84%) / PSEG (5.54%) / RE (0.22%)
b1593 Reconductor the Bowie - Burtonsville 230 kV circuit and upgrade terminal equipments at Bowie and Burtonsville 230 kV substations		AEC (2.40%) / APS (3.83%) / BGE (65.87%) / DPL (4.44%) / JCPL (3.94%) / ME (2.16%) / Neptune* (0.39%) / PECO (8.37%) / PPL (2.84%) / PSEG (5.54%) / RE (0.22%)
b1594 Reconductor the Oak Grove – Bowie 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Bowie 230 kV substations		AEC (2.40%) / APS (3.83%) / BGE (65.87%) / DPL (4.44%) / JCPL (3.94%) / ME (2.16%) / Neptune* (0.39%) / PECO (8.37%) / PPL (2.84%) / PSEG (5.54%) / RE (0.22%)
b1595 Reconductor the Bowie – Burtonsville 230 kV ‘23042’ circuit and upgrade terminal equipments at Oak Grove and Burtonsville 230 kV substations		AEC (2.40%) / APS (3.83%) / BGE (65.87%) / DPL (4.44%) / JCPL (3.94%) / ME (2.16%) / Neptune* (0.39%) / PECO (8.37%) / PPL (2.84%) / PSEG (5.54%) / RE (0.22%)
b1596 Reconductor the Dickerson station “H” – Quince Orchard 230 kV ‘23032’ circuit and upgrade terminal equipments at Dickerson station “H” and Quince Orchard 230 kV substations		AEC (0.80%) / BGE (33.68%) / DPL (2.09%) / PECO (3.07%) / PEPCO (60.36%)

\* Neptune Regional Transmission System, LLC

**Potomac Electric Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1597	Reconductor the Oak Grove - Aquasco 230 kV '23062' circuit and upgrade terminal equipments at Oak Grove and Aquasco 230 kV substations	AEC (1.44%) / BGE (48.60%) / DPL (2.52%) / PECO (5.00%) / PEPCO (42.44%)
b2008	Reconductor feeder 23032 and 23034 to high temp. conductor (10 miles)	BGE (33.05%) / DPL (1.38%) / PECO (1.35%) / PEPCO (64.22%) /
b2136	Reconductor the Morgantown - V3-017 230 kV '23086' circuit and replace terminal equipments at Morgantown	PEPCO (100%)
b2137	Reconductor the Morgantown - Talbert 230 kV '23085' circuit and replace terminal equipment at Morgantown	PEPCO (100%)
b2138	Replace terminal equipments at Hawkins 230 kV substation	PEPCO (100%)

## SCHEDULE 12 – APPENDIX

### (12) Public Service Electric and Gas Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0025	Convert the Bergen-Leonia 138 Kv circuit to 230 kV circuit.	PSEG (100%)
b0090	Add 150 MVAR capacitor at Camden 230 kV	PSEG (100%)
b0121	Add 150 MVAR capacitor at Aldene 230 kV	PSEG (100%)
b0122	Bypass the Essex 138 kV series reactors	PSEG (100%)
b0125	Add Special Protection Scheme at Bridgewater to automatically open 230 kV breaker for outage of Branchburg – Deans 500 kV and Deans 500/230 kV #1 transformer	PSEG (100%)
b0126	Replace wavetrap on Branchburg – Flagtown 230 kV	PSEG (100%)
b0127	Replace terminal equipment to increase Brunswick – Adams – Bennetts Lane 230 kV to conductor rating	PSEG (100%)
b0129	Replace wavetrap on Flagtown – Somerville 230 kV	PSEG (100%)
b0130	Replace all derated Branchburg 500/230 kV transformers	AEC (1.36%) / JCPL (47.76%) / PSEG (50.88%)
b0134	Upgrade or Retension PSEG portion of Kittatinny – Newton 230 kV circuit	JCPL (51.11%) / PSEG (45.96%) / RE (2.93%)

The Annual Revenue Requirement for all Public Service Electric and Gas Company Projects (Required Transmission Enhancements) in this Section 12 shall be as specified in Attachment 7 of Attachment H-10A and under the procedures detailed in Attachment H-10B.

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0145	Build new Essex – Aldene 230 kV cable connected through a phase angle regulator at Essex	PSEG (21.78%) / JCPL (73.45%) / RE (4.77%)
b0157	Add 100MVAR capacitor at West Orange 138kV substation	PSEG (100%)
b0158	Close the Sunnymeade "C" and "F" bus tie	PSEG (100%)
b0159	Make the Bayonne reactor permanent installation	PSEG (100%)
b0160	Relocate the X-2250 circuit from Hudson 1-6 bus to Hudson 7-12 bus	PSEG (100%)
b0161	Install 230/138kV transformer at Metuchen substation	PSEG (99.80%) / RE (0.20%)
b0162	Upgrade the Edison – Meadow Rd 138kV “Q” circuit	PSEG (100%)
b0163	Upgrade the Edison – Meadow Rd 138kV “R” circuit	PSEG (100%)
b0169	Build a new 230 kV section from Branchburg – Flagtown and move the Flagtown – Somerville 230 kV circuit to the new section	AEC (1.76%) / JCPL (26.50%) / Neptune* (10.85%) / PSEG (60.89%)
b0170	Reconductor the Flagtown-Somerville-Bridgewater 230 kV circuit with 1590 ACSS	JCLP (42.95%) / Neptune* (17.90%) / PSEG (38.36%) RE (0.79%)

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements      Annual Revenue Requirement      Responsible Customer(s)

b0172.2	Replace wave trap at Branchburg 500kV substation		<b>Load-Ratio Share Allocation;</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> AEC (5.32%) / JCPL (33.44%) / NEPTUNE (5.35%) / PSEG (53.73%) / RE (2.16%)
b0184	Replace Hudson 230kV circuit breakers #1-2		PSEG (100%)
b0185	Replace Deans 230kV circuit breakers #9-10		PSEG (100%)
b0186	Replace Essex 230kV circuit breaker #5-6		PSEG (100%)
b1082	Install 230/138 kV transformer at Bergen substation		PENELEC (16.52%) / PSEG (80.29%) / RE (3.19%)

\* Neptune Regional Transmission System, LLC



**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0201	Branchburg substation: replace wave trap on Branchburg – Readington 230 kV circuit		PSEG (100%)
b0213.1	Replace New Freedom 230 kV breaker BS2-6		PSEG (100%)
b0213.3	Replace New Freedom 230 kV breaker BS2-8		PSEG (100%)
b0274	Replace both 230/138 kV transformers at Roseland		PSEG (100%)
b0275	Upgrade the two 138 kV circuits between Roseland and West Orange		PSEG (100%)
b0278	Install 228 MVAR capacitor at Roseland 230 kV substation		PSEG (100%)
b0290	Install 400 MVAR capacitor in the Branchburg 500 kV vicinity		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> AEC (5.32%) / JCPL (33.44%) / NEPTUNE (5.35%) / PSEG (53.73%) / RE (2.16%)
b0358	Reconductor the PSEG portion of Buckingham – Pleasant Valley 230 kV, replace wave trap and metering transformer		PSEG (100%)

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0368	Reconductor Tosco – G22_MTX 230 kV circuit with 1033 bundled ACSS		PSEG (100%)
b0371	Make the Metuchen 138 kV bus solid and upgrade 6 breakers at the Metuchen substation		PSEG (100%)
b0372	Make the Athenia 138 kV bus solid and upgrade 2 breakers at the Athenia substation		PSEG (100%)
b0395	Replace Hudson 230 kV breaker BS4-5		PSEG (100%)
b0396	Replace Hudson 230 kV breaker BS1-6		PSEG (100%)
b0397	Replace Hudson 230 kV breaker BS3-4		PSEG (100%)
b0398	Replace Hudson 230 kV breaker BS5-6		PSEG (100%)
b0401.1	Replace Roseland 230 kV breaker BS6-7		PSEG (100%)
b0401.2	Replace Roseland 138 kV breaker O-1315		PSEG (100%)
b0401.3	Replace Roseland 138 kV breaker S-1319		PSEG (100%)
b0401.4	Replace Roseland 138 kV breaker T-1320		PSEG (100%)
b0401.5	Replace Roseland 138 kV breaker G-1307		PSEG (100%)
b0401.6	Replace Roseland 138 kV breaker P-1316		PSEG (100%)
b0401.7	Replace Roseland 138 kV breaker 220-4		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0401.8	Replace W. Orange 138 kV breaker 132-4	PSEG (100%)
b0411	Install 4 <sup>th</sup> 500/230 kV transformer at New Freedom	AEC (47.01%) / JCPL (7.04%) / Neptune* (0.28%) / PECO (23.36%) / PSEG (22.31%)
b0423	Reconductor Readington (2555) – Branchburg (4962) 230 kV circuit w/1590 ACSS	PSEG (100%)
b0424	Replace Readington wavetrap on Readington (2555) – Roseland (5017) 230 kV circuit	PSEG (100%)
b0425	Reconductor Linden (4996) – Tosco (5190) 230 kV circuit w/1590 ACSS (Assumes operating at 220 degrees C)	PSEG (100%)
b0426	Reconductor Tosco (5190) – G22_MTX5 (90220) 230 kV circuit w/1590 ACSS (Assumes operation at 220 degrees C)	PSEG (100%)
b0427	Reconductor Athenia (4954) – Saddle Brook (5020) 230 kV circuit river section	PSEG (100%)
b0428	Replace Roseland wavetrap on Roseland (5019) – West Caldwell “G” (5089) 138 kV circuit	PSEG (100%)
b0429	Reconductor Kittatinny (2553) – Newton (2535) 230 kV circuit w/1590 ACSS	JCPL (42.63%) / Neptune* (3.65%) / PSEG (51.45%) / RE (2.27%)
b0439	Spare Deans 500/230 kV transformer	PSEG (100%)
b0446.1	Upgrade Bayway 138 kV breaker #2-3	PSEG (100%)
b0446.2	Upgrade Bayway 138 kV breaker #3-4	PSEG (100%)

## Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0446.3	Upgrade Bayway 138 kV breaker #6-7	PSEG (100%)
b0446.4	Upgrade the breaker associated with TX 132-5 on Linden 138 kV	PSEG (100%)
b0470	Install 138 kV breaker at Roseland and close the Roseland 138 kV buses	PSEG (100%)
b0471	Replace the wave traps at both Lawrence and Pleasant Valley on the Lawrence – Pleasant Vallen 230 kV circuit	PSEG (100%)
b0472	Increase the emergency rating of Saddle Brook – Athenia 230 kV by 25% by adding forced cooling	PSEG (96.40%) / RE (3.60%)
b0473	Move the 150 MVAR mobile capacitor from Aldene 230 kV to Lawrence 230 kV substation	PSEG (100%)
b0489	Build new 500 kV transmission facilities from Pennsylvania – New Jersey border at Bushkill to Roseland	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)†
		<b>DFAX Allocation:</b> JCPL (39.91%) / NEPTUNE (3.86%) / PSEG (54.05%) / RE (2.18%)

\* Neptune Regional Transmission System, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b489.1	Replace Athenia 230 kV breaker 31H		PSEG (100%)
b489.2	Replace Bergen 230 kV breaker 10H		PSEG (100%)
b489.3	Replace Saddlebrook 230 kV breaker 21P		PSEG (100%)
b0489.4	Install two Roseland 500/230 kV transformers as part of the Susquehanna – Roseland 500 kV project		AEC (5.14%) / ComEd (0.29%) / Dayton (0.03%) / DPL (1.78%) / JCPL (33.04%) / Neptune* (6.38%) / PECO (10.14%) / PENELEC (0.57%) / PSEG (41.10%) / RE (1.53%) ††
b0489.5	Replace Roseland 230 kV breaker '42H' with 80 kA		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> JCPL (39.91%) / NEPTUNE (3.86%) / PSEG (54.05%) / RE (2.18%)

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.6	Replace Roseland 230 kV breaker '51H' with 80 kA	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd (13.31%)  / Dayton (2.11%) / DEOK  (3.29%) / DL (1.75%) / DPL  (2.50%) / Dominion (12.86%) /  EKPC (1.87%) / JCPL (3.74%) /  ME (1.90%) / NEPTUNE*  (0.44%) / PECO (5.34%) /  PENELEC (1.89%) / PEPCO  (3.99%) / PPL (4.84%) / PSEG  (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  JCPL (39.91%) / NEPTUNE  (3.86%) / PSEG (54.05%) / RE  (2.18%)</p>
b0489.7	Replace Roseland 230 kV breaker '71H' with 80 kA	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd (13.31%)  / Dayton (2.11%) / DEOK  (3.29%) / DL (1.75%) / DPL  (2.50%) / Dominion (12.86%) /  EKPC (1.87%) / JCPL (3.74%) /  ME (1.90%) / NEPTUNE*  (0.44%) / PECO (5.34%) /  PENELEC (1.89%) / PEPCO  (3.99%) / PPL (4.84%) / PSEG  (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  JCPL (39.91%) / NEPTUNE  (3.86%) / PSEG (54.05%) / RE  (2.18%)</p>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.8	Replace Roseland 230 kV breaker '31H' with 80 kA	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  JCPL (39.91%) / NEPTUNE  (3.86%) / PSEG (54.05%) / RE  (2.18%)</p>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.9	Replace Roseland 230 kV breaker '11H' with 80 kA	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  JCPL (39.91%) / NEPTUNE  (3.86%) / PSEG (54.05%) / RE  (2.18%)</p>
b0489.10	Replace Roseland 230 kV breaker '21H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  JCPL (39.91%) / NEPTUNE  (3.86%) / PSEG (54.05%) / RE  (2.18%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.11	Replace Roseland 230 kV breaker '32H'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> JCPL (39.91%) / NEPTUNE (3.86%) / PSEG (54.05%) / RE (2.18%)
b0489.12	Replace Roseland 230 kV breaker '12H'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> JCPL (39.91%) / NEPTUNE (3.86%) / PSEG (54.05%) / RE (2.18%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.13	Replace Roseland 230 kV breaker '52H'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> JCPL (39.91%) / NEPTUNE (3.86%) / PSEG (54.05%) / RE (2.18%)
b0489.14	Replace Roseland 230 kV breaker '41H'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> JCPL (39.91%) / NEPTUNE (3.86%) / PSEG (54.05%) / RE (2.18%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0489.15	Replace Roseland 230 kV breaker '72H'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  JCPL (39.91%) / NEPTUNE  (3.86%) / PSEG (54.05%) / RE  (2.18%)</p>
b0498	Loop the 5021 circuit into New Freedom 500 kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (9.56%) / JCPL (26.03%)  / NEPTUNE (3.02%) / PECO  (18.39%) / PSEG (41.34%) /  RE (1.66%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0498.1	Upgrade the 20H circuit breaker		PSEG (100%)
b0498.2	Upgrade the 22H circuit breaker		PSEG (100%)
b0498.3	Upgrade the 30H circuit breaker		PSEG (100%)
b0498.4	Upgrade the 32H circuit breaker		PSEG (100%)
b0498.5	Upgrade the 40H circuit breaker		PSEG (100%)
b0498.6	Upgrade the 42H circuit breaker		PSEG (100%)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0565	Install 100 MVAR capacitor at Cox's Corner 230 kV substation		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0578	Replace Essex 138 kV breaker 4LM (C1355 line to ECRRF)		PSEG (100%)
b0579	Replace Essex 138 kV breaker 1LM (220-1 TX)		PSEG (100%)
b0580	Replace Essex 138 kV breaker 1BM (BS1-3 tie)		PSEG (100%)
b0581	Replace Essex 138 kV breaker 2BM (BS3-4 tie)		PSEG (100%)
b0582	Replace Linden 138 kV breaker 3 (132-7 TX)		PSEG (100%)
b0592	Replace Metuchen 138 kV breaker '2-2 Transfer'		PSEG (100%)
b0664	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0665	Reconductor with 2x1033 ACSS conductor		JCPL (36.35%) / NEPTUNE* (18.80%) / PSEG (43.24%) / RE (1.61%)
b0668	Reconductor with 2x1033 ACSS conductor		JCPL (39.41%) / NEPTUNE* (20.38%) / PSEG (38.76%) / RE (1.45%)
b0671	Replace terminal equipment at both ends of line		PSEG (100%)
b0743	Add a bus tie breaker at Roseland 138 kV		PSEG (100%)
b0812	Increase operating temperature on line for one year to get 925E MVA rating		PSEG (100%)
b0813	Reconductor Hudson – South Waterfront 230 kV circuit		BGE (1.25%) / JCPL (9.92%) / NEPTUNE* (0.87%) / PEPCO (1.11%) / PSEG (83.73%) / RE (3.12%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814	New Essex – Kearney 138 kV circuit and Kearney 138 kV bus tie	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.1	Replace Kearny 138 kV breaker '1-SHT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.2	Replace Kearny 138 kV breaker '15HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.3	Replace Kearny 138 kV breaker '14HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.4	Replace Kearny 138 kV breaker '10HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.5	Replace Kearny 138 kV breaker '2HT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.6	Replace Kearny 138 kV breaker '22HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.7	Replace Kearny 138 kV breaker '4HT' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.8	Replace Kearny 138 kV breaker '25HF' with 80 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.9	Replace Essex 138 kV breaker '2LM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0814.10	Replace Essex 138 kV breaker '1BT' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.11	Replace Essex 138 kV breaker '2PM' with 63 kA breaker and 2.5 cycle contact parting time	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.12	Replace Marion 138 kV breaker '2HM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.13	Replace Marion 138 kV breaker '2LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.14	Replace Marion 138 kV breaker '1LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.15	Replace Marion 138 kV breaker '6PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.16	Replace Marion 138 kV breaker '3PM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.17	Replace Marion 138 kV breaker '4LM' with 63 kA breaker	JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0814.18	Replace Marion 138 kV breaker '3LM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.19	Replace Marion 138 kV breaker '1HM' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.20	Replace Marion 138 kV breaker '2PM3' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.21	Replace Marion 138 kV breaker '2PM1' with 63 kA breaker		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.22	Replace ECRR 138 kV breaker '903'		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.23	Replace Foundry 138 kV breaker '21P'		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.24	Change the contact parting time on Essex 138 kV breaker '3LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.25	Change the contact parting time on Essex 138 kV breaker '2BM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0814.26	Change the contact parting time on Essex 138 kV breaker '1BM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.27	Change the contact parting time on Essex 138 kV breaker '3PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.28	Change the contact parting time on Essex 138 kV breaker '4LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.29	Change the contact parting time on Essex 138 kV breaker '1PM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)
b0814.30	Change the contact parting time on Essex 138 kV breaker '1LM' to 2.5 cycles		JCPL (23.49%) / NEPTUNE* (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0829	Build Branchburg to Roseland 500 kV circuit as part of Branchburg – Hudson 500 kV project	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0829.6	Replace Branchburg 500 kV breaker 91X	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> PSEG (96.13%) / RE (3.87%)
b0829.9	Replace Branchburg 230 kV breaker 102H	PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0829.11	Replace Branchburg 230 kV breaker 32H		PSEG (100%)
b0829.12	Replace Branchburg 230 kV breaker 52H		PSEG (100%)
b0830	Build Roseland - Hudson 500 kV circuit as part of Branchburg – Hudson 500 kV project		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0830.1	Replace Roseland 230 kV breaker '82H' with 80 kA		PSEG (100%)
b0830.2	Replace Roseland 230 kV breaker '91H' with 80 kA		PSEG (100%)
b0830.3	Replace Roseland 230 kV breaker '22H' with 80 kA		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0831	Replace 138/13 kV transformers with 230/13 kV units as part of Branchburg – Hudson 500 kV project		ComEd (2.57%) / Dayton (0.09%) / PENELEC (2.82%) / PSEG (90.97%) / RE (3.55%)
b0832	Build Hudson 500 kV switching station as part of Branchburg – Hudson 500 kV project		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0833	Build Roseland 500 kV switching station as part of Branchburg – Hudson 500 kV project		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0834	Convert the E-1305/F-1306 to one 230 kV circuit as part of Branchburg – Hudson 500 kV project	ComEd (2.57%) / Dayton (0.09%) / PENELEC (2.82%) / PSEG (90.97%) / RE (3.55%)
b0835	Build Hudson 230 kV transmission lines as part of Roseland – Hudson 500 kV project as part of Branchburg – Hudson 500 kV project	ComEd (2.57%) / Dayton (0.09%) / PENELEC (2.82%) / PSEG (90.97%) / RE (3.55%)
b0836	Install transformation at new Hudson 500 kV switching station and perform Hudson 230 kV and 345 kV station work as part of Branchburg – Hudson 500 kV project	ComEd (2.57%) / Dayton (0.09%) / PENELEC (2.82%) / PSEG (90.97%) / RE (3.55%)
b0882	Replace Hudson 230 kV breaker 1HA with 80 kA	PSEG (100%)
b0883	Replace Hudson 230 kV breaker 2HA with 80 kA	PSEG (100%)
b0884	Replace Hudson 230 kV breaker 3HB with 80 kA	PSEG (100%)
b0885	Replace Hudson 230 kV breaker 4HA with 80 kA	PSEG (100%)
b0886	Replace Hudson 230 kV breaker 4HB with 80 kA	PSEG (100%)
b0889	Replace Bergen 230 kV breaker '21H'	PSEG (100%)
b0890	Upgrade New Freedom 230 kV breaker '21H'	PSEG (100%)
b0891	Upgrade New Freedom 230 kV breaker '31H'	PSEG (100%)
b0899	Replace ECRR 138 kV breaker 901	PSEG (100%)
b0900	Replace ECRR 138 kV breaker 902	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1013	Replace Linden 138 kV breaker '7PB'	PSEG (100%)
b1017	Reconductor South Mahwah - Waldwick 345 kV J-3410 circuit	JCPL (29.27%) / NEPTUNE* (2.76%) / PSEG (65.42%) / RE (2.55%)
b1018	Reconductor South Mahwah - Waldwick 345 kV K-3411 circuit	JCPL (29.44%) / NEPTUNE* (2.76%) / PSEG (65.25%) / RE (2.55%)
b1019.1	Replace wave trap, line disconnect and ground switch at Roseland on the F-2206 circuit	PSEG (100%)
b1019.2	Replace wave trap, line disconnect and ground switch at Roseland on the B-2258 circuit	PSEG (100%)
b1019.3	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the F-2206 circuit	PSEG (100%)
b1019.4	Replace 1-2 and 2-3 section disconnect and ground switches at Cedar Grove on the B-2258 circuit	PSEG (100%)
b1019.5	Replace wave trap, line disconnect and ground switch at Cedar Grove on the F-2206 circuit	PSEG (100%)
b1019.6	Replace line disconnect and ground switch at Cedar Grove on the K-2263 circuit	PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1019.7	Replace 2-4 and 4-5 section disconnect and ground switches at Clifton on the B-2258 circuit		PSEG (100%)
b1019.8	Replace 1-2 and 2-3 section disconnect and ground switches at Clifton on the K-2263 circuit		PSEG (100%)
b1019.9	Replace line, ground, 230 kV main bus disconnects at Athenia on the B-2258 circuit		PSEG (100%)
b1019.10	Replace wave trap, line, ground 230 kV breaker disconnect and 230 kV main bus disconnects at Athenia on the K-2263 circuit		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1082.1	Replace Bergen 138 kV breaker '30P' with 80 kA		PSEG (100%)
b1082.2	Replace Bergen 138 kV breaker '80P' with 80 kA		PSEG (100%)
b1082.3	Replace Bergen 138 kV breaker '70P' with 80 kA		PSEG (100%)
b1082.4	Replace Bergen 138 kV breaker '90P' with 63 kA		PSEG (100%)
b1082.5	Replace Bergen 138 kV breaker '50P' with 63 kA		PSEG (100%)
b1082.6	Replace Bergen 230 kV breaker '12H' with 80 kA		PSEG (100%)
b1082.7	Replace Bergen 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1082.8	Replace Bergen 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1082.9	Replace Bergen 230 kV breaker '20H' with 80 kA		PSEG (100%)
b1098	Re-configure the Bayway 138 kV substation and install three new 138 kV breakers		PSEG (100%)
b1099	Build a new 230 kV substation by tapping the Aldene – Essex circuit and install three 230/26 kV transformers, and serve some of the Newark area load from the new station		PSEG (100%)
b1100	Build a new 138 kV circuit from Bayonne to Marion		PSEG (100%)
b1101	Re-configure the Cedar Grove substation with breaker and half scheme and build a new 69 kV circuit from Cedar Grove to Hinchman		PSEG (100%)



**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1154	Convert the West Orange 138 kV substation, the two Roseland – West Orange 138 kV circuits, and the Roseland – Sewaren 138 kV circuit from 138 kV to 230 kV	PSEG (96.18%) / RE (3.82%)
b1155	Build a new 230 kV circuit from Branchburg to Middlesex Sw. Rack. Build a new 230 kV substation at Middlesex	JCPL (4.61%) / PSEG (91.75%) / RE (3.64%)
b1155.3	Replace Branchburg 230 kV breaker '81H' with 63 kA	PSEG (100%)
b1155.4	Replace Branchburg 230 kV breaker '72H' with 63 kA	PSEG (100%)
b1155.5	Replace Branchburg 230 kV breaker '61H' with 63 kA	PSEG (100%)
b1155.6	Replace Branchburg 230 kV breaker '41H' with 63 kA	PSEG (100%)
b1156	Convert the Burlington, Camden, and Cuthbert Blvd 138 kV substations, the 138 kV circuits from Burlington to Camden, and the 138 kV circuit from Camden to Cuthbert Blvd. from 138 kV to 230 kV	PSEG (96.18%) / RE (3.82%)
b1156.13	Replace Camden 230 kV breaker '22H' with 80 kA	PSEG (100%)
b1156.14	Replace Camden 230 kV breaker '32H' with 80 kA	PSEG (100%)
b1156.15	Replace Camden 230 kV breaker '21H' with 80 kA	PSEG (100%)

\*Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1156.16	Replace New Freedom 230 kV breaker '50H' with 63 kA		PSEG (100%)
b1156.17	Replace New Freedom 230 kV breaker '41H' with 63 kA		PSEG (100%)
b1156.18	Replace New Freedom 230 kV breaker '51H' with 63 kA		PSEG (100%)
b1156.19	Rebuild Camden 230 kV to 80 kA		PSEG (100%)
b1156.20	Rebuild Burlington 230 kV to 80 kA		PSEG (100%)
b1197.1	Reconductor the PSEG portion of the Burlington – Croydon circuit with 1590 ACSS		PSEG (100%)
b1228	Re-configure the Lawrence 230 kV substation to breaker and half		PSEG (96.18%) / RE (3.82%)
b1255	Build a new 69 kV substation (Ridge Road) and build new 69 kV circuits from Montgomery – Ridge Road – Penns Neck/Dow Jones		PSEG (96.18%) / RE (3.82%)
b1304.1	Convert the existing 'D1304' and 'G1307' 138 kV circuits between Roseland – Kearny – Hudson to 230 kV operation		AEC (0.28%) / BGE (1.18%) / ComEd (2.83%) / Dayton (0.16%) / JCPL (1.43%) / Neptune (0.09%) / PENELEC (3.63%) / PEPCO (1.27%) / PSEG (85.73%) / RE (3.40%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1304.2	Expand existing Bergen 230 kV substation and reconfigure the Athenia 230 kV substation to breaker and a half scheme	AEC (0.28%) / BGE (1.18%) / ComEd (2.83%) / Dayton (0.16%) / JCPL (1.43%) / Neptune (0.09%) / PENELEC (3.63%) / PEPCO (1.27%) / PSEG (85.73%) / RE (3.40%)
b1304.3	Build second 230 kV underground cable from Bergen to Athenia	AEC (0.28%) / BGE (1.18%) / ComEd (2.83%) / Dayton (0.16%) / JCPL (1.43%) / Neptune (0.09%) / PENELEC (3.63%) / PEPCO (1.27%) / PSEG (85.73%) / RE (3.40%)
b1304.4	Build second 230 kV underground cable from Hudson to South Waterfront	AEC (0.28%) / BGE (1.18%) / ComEd (2.83%) / Dayton (0.16%) / JCPL (1.43%) / Neptune (0.09%) / PENELEC (3.63%) / PEPCO (1.27%) / PSEG (85.73%) / RE (3.40%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.5	Replace Athenia 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.6	Replace Athenia 230 kV breaker '41H' with 80 kA		PSEG (100%)
b1304.7	Replace South Waterfront 230 kV breaker '12H' with 80 kA		PSEG (100%)
b1304.8	Replace South Waterfront 230 kV breaker '22H' with 80 kA		PSEG (100%)
b1304.9	Replace South Waterfront 230 kV breaker '32H' with 80 kA		PSEG (100%)
b1304.10	Replace South Waterfront 230 kV breaker '52H' with 80 kA		PSEG (100%)
b1304.11	Replace South Waterfront 230 kV breaker '62H' with 80 kA		PSEG (100%)
b1304.12	Replace South Waterfront 230 kV breaker '72H' with 80 kA		PSEG (100%)
b1304.13	Replace South Waterfront 230 kV breaker '82H' with 80 kA		PSEG (100%)
b1304.14	Replace Essex 230 kV breaker '20H' with 80 kA		PSEG (100%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1304.15	Replace Essex 230 kV breaker '21H' with 80 kA		PSEG (100%)
b1304.16	Replace Essex 230 kV breaker '10H' with 80 kA		PSEG (100%)
b1304.17	Replace Essex 230 kV breaker '11H' with 80 kA		PSEG (100%)
b1304.18	Replace Essex 230 kV breaker '11HL' with 80 kA		PSEG (100%)
b1304.19	Replace Newport R 230 kV breaker '23H' with 63 kA		PSEG (100%)
b1304.20	Rebuild Athenia 230 kV substation to 80 kA		PSEG (100%)
b1304.21	Rebuild Bergen 230 kV substation to 80 kA		PSEG (100%)
b1398	Build two new parallel underground circuits from Gloucester to Camden		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.1	Install shunt reactor at Gloucester to offset cable charging		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.2	Reconfigure the Cuthbert station to breaker and a half scheme		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.3	Build a second 230 kV parallel overhead circuit from Mickelton – Gloucester		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1398.4	Reconductor the existing Mickleton – Gloucester 230 kV circuit (PSEG portion)		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.7	Reconductor the Camden – Richmond 230 kV circuit (PSEG portion) and upgrade terminal equipments at Camden substations		JCPL (13.03%) / NEPTUNE (1.20%) / PECO (51.93%) / PEPCO (0.58%) / PSEG (31.99%) / RE (1.27%)
b1398.15	Replace Gloucester 230 kV breaker '21H' with 63 kA		PSEG (100%)
b1398.16	Replace Gloucester 230 kV breaker '51H' with 63 kA		PSEG (100%)
b1398.17	Replace Gloucester 230 kV breaker '56H' with 63 kA		PSEG (100%)
b1398.18	Replace Gloucester 230 kV breaker '26H' with 63 kA		PSEG (100%)
b1398.19	Replace Gloucester 230 kV breaker '71H' with 63 kA		PSEG (100%)
b1399	Convert the 138 kV path from Aldene – Springfield Rd. – West Orange to 230 kV		PSEG (96.18%) / RE (3.82%)
b1400	Install 230 kV circuit breakers at Bennetts Ln. “F” and “X” buses		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1410	Replace Salem 500 kV breaker '11X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.13%) / RE (3.87%)</p>
b1411	Replace Salem 500 kV breaker '12X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.13%) / RE (3.87%)</p>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1412	Replace Salem 500 kV breaker '20X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.13%) / RE (3.87%)</p>
b1413	Replace Salem 500 kV breaker '21X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.13%) / RE (3.87%)</p>

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1414	Replace Salem 500 kV breaker '31X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.13%) / RE (3.87%)</p>
b1415	Replace Salem 500 kV breaker '32X'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd  (13.31%) / Dayton (2.11%) /  DEOK (3.29%) / DL (1.75%) /  DPL (2.50%) / Dominion  (12.86%) / EKPC (1.87%) /  JCPL (3.74%) / ME (1.90%) /  NEPTUNE* (0.44%) / PECO  (5.34%) / PENELEC (1.89%) /  PEPCO (3.99%) / PPL (4.84%)  / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  PSEG (96.13%) / RE (3.87%)</p>

\* Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1539	Replace Tosco 230 kV breaker 'CB1' with 63 kA		PSEG (100%)
b1540	Replace Tosco 230 kV breaker 'CB2' with 63 kA		PSEG (100%)
b1541	Open the Hudson 230 kV bus tie		PSEG (100%)
b1588	Reconductor the Eagle Point - Gloucester 230 kV circuit #1 and #2 with higher conductor rating		JCPL (10.48%) / Neptune* (1.00%) / PECO (31.30%) / PSEG (55.03%) / RE (2.19%)
b1589	Re-configure the Kearny 230 kV substation and loop the P-2216-1 (Essex - NJT Meadows) 230 kV circuit		ATSI (10.02%) / PENELEC (9.74%) / PSEG (77.16%) / RE (3.08%)
b1590	Upgrade the PSEG portion of the Camden Richmond 230 kV circuit to six wire conductor and replace terminal equipment at Camden		BGE (3.06%) / ME (0.83%) / PECO (91.70%) / PEPCO (1.94%) / PPL (2.47%)
b1749	Advance n1237 (Replace Essex 230 kV breaker '22H' with 80kA)		PSEG (100%)
b1750	Advance n0666.5 (Replace Hudson 230 kV breaker '1HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1751	Advance n0666.3 (Replace Hudson 230 kV breaker '2HA' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)

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**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1752	Advance n0666.10 (Replace Hudson 230 kV breaker '2HB' with 80 kA (without TRV cap, so actually 63 kA))		PSEG (100%)
b1753	Marion 138 kV breaker '7PM' - delay the relay time to increase the contact parting time to 2.5 cycles		PSEG (100%)
b1754	Marion 138 kV breaker '3PM' - delay the relay time to increase the contact parting time to 2.5 cycles		PSEG (100%)
b1755	Marion 138 kV breaker '6PM' - delay the relay time to increase the contact parting time to 2.5 cycles		PSEG (100%)
b1787	Build a second 230 kV circuit from Cox's Corner - Lumberton		AEC (4.97%) / JCPL (44.34%) / NEPTUNE* (0.53%) / PSEG (48.23%) / RE (1.93%)
b2034	Install a reactor along the Kearny - Essex 138 kV line		PSEG (100%)
b2035	Replace Sewaren 138 kV breaker '11P'		PSEG (100%)
b2036	Replace Sewaren 138 kV breaker '21P'		PSEG (100%)
b2037	Replace PVSC 138 kV breaker '452'		PSEG (100%)
b2038	Replace PVSC 138 kV breaker '552'		PSEG (100%)

\*Neptune Regional Transmission System, LLC

**Public Service Electric and Gas Company (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2039	Replace Bayonne 138 kV breaker '11P'		PSEG (100%)
b2139	Reconductor the Mickleton - Gloucester 230 kV parallel circuits with double bundle conductor		PSEG (61.11%) / PECO (36.45%) / RE (2.44%)
b2146	Re-configure the Brunswick 230 kV and 69 kV substations		PSEG (96.16%) / RE (3.84%)
b2151	Construct Jackson Rd. 69 kV substation and loop the Cedar Grove - Hinchmans Ave into Jackson Rd. and construct Hawthorne 69 kV substation and build 69 kV circuit from Hinchmans Ave - Hawthorne - Fair Lawn		PSEG (100%)
b2159	Reconfigure the Linden, Bayway, North Ave, and Passaic Valley S.C. 138 kV substations. Construct and loop new 138 kV circuit to new airport station		PSEG (96.16%) / RE (3.84%)

\*Neptune Regional Transmission System, LLC

## SCHEDULE 12 – APPENDIX

### (14) Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0216	Install -100/+525 MVAR dynamic reactive device at Black Oak	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (58.23%) / Dominion (29.31%) / PEPCO (12.46%)
b0218	Install third Wylie Ridge 500/345kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		AEC (11.83%) / DPL (19.40%) / Dominion (13.81%) / JCPL (15.56%) / PECO (39.40%)
b0220	Upgrade coolers on Wylie Ridge 500/345 kV #7	
		AEC (11.83%) / DPL (19.40%) / Dominion (13.81%) / JCPL (15.56%) / PECO (39.40%)
b0229	Install fourth Bedington 500/138 kV	
		APS (50.98%) / BGE (13.42%) / DPL (2.03%) / Dominion (14.50%) / ME (1.43%) / PEPCO (17.64%)
b0230	Install fourth Meadowbrook 500/138 kV	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		APS (79.16%) / BGE (3.61%) / DPL (0.86%) / Dominion (11.75%) / ME (0.67%) / PEPCO (3.95%)

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0238	Reconductor Doubs – Dickerson and Doubs – Aqueduct 1200 MVA	As specified under the procedures detailed in Attachment H-18B, Section 1.b	BGE (16.66%) / Dominion (33.66%) / PEPCO (49.68%)
b0240	Open the Black Oak #3 500/138 kV transformer for the loss of Hatfield – Back Oak 500 kV line		APS (100%)
b0245	Replacement of the existing 954 ACSR conductor on the Bedington – Nipetown 138 kV line with high temperature/low sag conductor		APS (100%)
b0246	Rebuild of the Double Tollgate – Old Chapel 138 kV line with 954 ACSR conductor	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)
b0273	Open both North Shenandoah #3 transformer and Strasburg – Edinburgh 138 kV line for the loss of Mount Storm – Meadowbrook 572 500 kV		APS (100%)
b0322	Convert Lime Kiln substation to 230 kV operation		APS (100%)
b0323	Replace the North Shenandoah 138/115 kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (100%)

\* Neptune Regional Transmission System, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.2	Build new Meadow Brook – Loudoun 500 kV circuit (20 of 50 miles)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b0343	Replace Doubs 500/230 kV transformer #2	<p>As specified under the procedures detailed in Attachment H-18B, Section 1.b</p> <p>AEC (1.85%) / BGE (21.49%) / DPL (3.91%) / Dominion (28.86%) / ME (2.97%) / PECO (5.73%) / PEPCO (35.19%)</p>
b0344	Replace Doubs 500/230 kV transformer #3	<p>As specified under the procedures detailed in Attachment H-18B, Section 1.b</p> <p>AEC (1.86%) / BGE (21.50%) / DPL (3.91%) / Dominion (28.82%) / ME (2.97%) / PECO (5.74%) / PEPCO (35.20%)</p>
b0345	Replace Doubs 500/230 kV transformer #4	<p>As specified under the procedures detailed in Attachment H-18B, Section 1.b</p> <p>AEC (1.85%) / BGE (21.49%) / DPL (3.90%) / Dominion (28.83%) / ME (2.98%) / PECO (5.75%) / PEPCO (35.20%)</p>

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.1	Build new Mt. Storm – 502 Junction 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (74.10%) / PEPCO (25.90%)
b0347.2	Build new Mt. Storm – Meadow Brook 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b
		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)

\* Neptune Regional Transmission System, LLC



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.3	Build new 502 Junction 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b
b0347.4	Upgrade Meadow Brook 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.5	Replace Harrison 500 kV breaker HL-3	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (74.10%) / PEPCO (25.90%)
b0347.6	Upgrade (per ABB inspection) breaker HL-6	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (74.10%) / PEPCO (25.90%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.7	Upgrade (per ABB inspection) breaker HL-7	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (74.10%) / PEPCO (25.90%)
b0347.8	Upgrade (per ABB inspection) breaker HL-8	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (74.10%) / PEPCO (25.90%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.9	Upgrade (per ABB inspection) breaker HL-10	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (74.10%) / PEPCO (25.90%)</p>
b0347.10	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-1	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (74.10%) / PEPCO (25.90%)</p>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.11	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-3	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (74.10%) / PEPCO (25.90%)</p>
b0347.12	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-4	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (74.10%) / PEPCO (25.90%)</p>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.13	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-6	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (74.10%) / PEPCO (25.90%)</p>
b0347.14	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-7	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (74.10%) / PEPCO (25.90%)</p>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.15	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-9	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (74.10%) / PEPCO (25.90%)
b0347.16	Upgrade (per ABB inspection) Harrison 500 kV breaker 'HL-3'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (74.10%) / PEPCO (25.90%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.17	Replace Meadow Brook 138 kV breaker 'MD-10'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)
b0347.18	Replace Meadow Brook 138 kV breaker 'MD-11'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)

\*Neptune Regional Transmission System, LLC



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.19	Replace Meadow Brook 138 kV breaker 'MD-12'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)
b0347.20	Replace Meadow Brook 138 kV breaker 'MD-13'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.21	Replace Meadow Brook 138 kV breaker 'MD-14'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)
b0347.22	Replace Meadow Brook 138 kV breaker 'MD-15'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.23	Replace Meadow Brook 138 kV breaker 'MD-16'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</p>
b0347.24	Replace Meadow Brook 138 kV breaker 'MD-17'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</p>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.25	Replace Meadow Brook 138 kV breaker 'MD-18'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)
b0347.26	Replace Meadow Brook 138 kV breaker 'MD-22#1 CAP'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.27	Replace Meadow Brook 138 kV breaker 'MD-4'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)
b0347.28	Replace Meadow Brook 138 kV breaker 'MD-5'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.29	Replace Meadowbrook 138 kV breaker 'MD-6'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)
b0347.30	Replace Meadowbrook 138 kV breaker 'MD-7'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.31	Replace Meadowbrook 138 kV breaker 'MD-8'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd (13.31%)  / Dayton (2.11%) / DEOK  (3.29%) / DL (1.75%) / DPL  (2.50%) / Dominion (12.86%) /  EKPC (1.87%) / JCPL (3.74%) /  ME (1.90%) / NEPTUNE*  (0.44%) / PECO (5.34%) /  PENELEC (1.89%) / PEPCO  (3.99%) / PPL (4.84%) / PSEG  (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (33.78%) / Dominion  (57.67%) / PEPCO (8.55%)</p>
b0347.32	Replace Meadowbrook 138 kV breaker 'MD-9'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd (13.31%)  / Dayton (2.11%) / DEOK  (3.29%) / DL (1.75%) / DPL  (2.50%) / Dominion (12.86%) /  EKPC (1.87%) / JCPL (3.74%) /  ME (1.90%) / NEPTUNE*  (0.44%) / PECO (5.34%) /  PENELEC (1.89%) / PEPCO  (3.99%) / PPL (4.84%) / PSEG  (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (33.78%) / Dominion  (57.67%) / PEPCO (8.55%)</p>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0347.33	Replace Meadow Brook 138kV breaker 'MD-1'		APS (100%)
b0347.34	Replace Meadow Brook 138kV breaker 'MD-2'		APS (100%)
b0348	Upgrade Stonewall – Inwood 138 kV with 954 ACSR conductor		APS (100%)
b0373	Convert Doubs – Monocacy 138 kV facilities to 230 kV operation		AEC (1.82%) / APS (76.84%) / DPL (2.64%) / JCPL (4.53%) / ME (9.15%) / Neptune* (0.42%) / PPL (4.60%)
b0393	Replace terminal equipment at Harrison 500 kV and Belmont 500 kV		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> ATSI (35.12%) / Dayton (22.04%) / DEOK (36.72%) / EKPC (6.12%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0406.1	Replace Mitchell 138 kV breaker “#4 bank”		APS (100%)
b0406.2	Replace Mitchell 138 kV breaker “#5 bank”		APS (100%)
b0406.3	Replace Mitchell 138 kV breaker “#2 transf”		APS (100%)
b0406.4	Replace Mitchell 138 kV breaker “#3 bank”		APS (100%)
b0406.5	Replace Mitchell 138 kV breaker “Charlerio #2”		APS (100%)
b0406.6	Replace Mitchell 138 kV breaker “Charlerio #1”		APS (100%)
b0406.7	Replace Mitchell 138 kV breaker “Shepler Hill Jct”		APS (100%)
b0406.8	Replace Mitchell 138 kV breaker “Union Jct”		APS (100%)
b0406.9	Replace Mitchell 138 kV breaker “#1-2 138 kV bus tie”		APS (100%)
b0407.1	Replace Marlowe 138 kV breaker “#1 transf”		APS (100%)
b0407.2	Replace Marlowe 138 kV breaker “MBO”		APS (100%)
b0407.3	Replace Marlowe 138 kV breaker “BMA”		APS (100%)
b0407.4	Replace Marlowe 138 kV breaker “BMR”		APS (100%)
b0407.5	Replace Marlowe 138 kV breaker “WC-1”		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0407.6	Replace Marlowe 138 kV breaker “R11”		APS (100%)
b0407.7	Replace Marlowe 138 kV breaker “W”		APS (100%)
b0407.8	Replace Marlowe 138 kV breaker “138 kV bus tie”		APS (100%)
b0408.1	Replace Trissler 138 kV breaker “Belmont 604”		APS (100%)
b0408.2	Replace Trissler 138 kV breaker “Edgelawn 90”		APS (100%)
b0409.1	Replace Weirton 138 kV breaker “Wylie Ridge 210”		APS (100%)
b0409.2	Replace Weirton 138 kV breaker “Wylie Ridge 216”		APS (100%)
b0410	Replace Glen Falls 138 kV breaker “McAlpin 30”		APS (100%)
b0417	Reconductor Mitchell – Shepler Hill Junction 138kV with 954 ACSR		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0418	Install a breaker failure auto-restoration scheme at Cabot 500 kV for the failure of the #6 breaker	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0419	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (100%)
b0420	Operating Procedure to open the Black Oak 500/138 kV transformer #3 for the loss of Hatfield – Ronco 500 kV and the Hatfield #3 Generation	APS (100%)
b0445	Upgrade substation equipment and reconductor the Tidd – Mahans Lane – Weirton 138kV circuit with 954 ACSR	APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0460	Raise limiting structures on Albright – Bethelboro 138 kV to raise the rating to 175 MVA normal 214 MVA emergency		APS (100%)
b0491	Construct an Amos to Welton Spring to WV state line 765 kV circuit (APS equipment)	As specified under the procedures detailed in Attachment H-19B	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</p>

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)	
b0492	Construct a Welton Spring to Kemptown 765 kV line (APS equipment)	As specified under the procedures detailed in Attachment H-19B	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)
b0492.3	Replace Eastalco 230 kV breaker D-26		APS (100%)
b0492.4	Replace Eastalco 230 kV breaker D-28		APS (100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0492.5	Replace Eastalco 230 kV breaker D-31		APS (100%)
b0495	Replace existing Kammer 765/500 kV transformer with a new larger transformer		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> APS (5.93%) / BGE (37.30%) / Dayton (5.03%) / DEOK (6.72%) / EKPC (1.12%) / PEPCO (43.90%)
b0533	Reconductor the Powell Mountain – Sutton 138 kV line		APS (100%)
b0534	Install a 28.61 MVAR capacitor on Sutton 138 kV		APS (100%)
b0535	Install a 44 MVAR capacitor on Dutch Fork 138 kV		APS (100%)
b0536	Replace Doubs circuit breaker DJ1		APS (100%)
b0537	Replace Doubs circuit breaker DJ7		APS (100%)
b0538	Replace Doubs circuit breaker DJ10		APS (100%)
b0572.1	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0572.2	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)
b0573	Reconfigure circuits in Butler – Cabot 138 kV area	APS (100%)
b0577	Replace Fort Martin 500 kV breaker FL-1	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (100%)
b0584	Install 33 MVAR 138 kV capacitor at Necessity 138 kV	APS (100%)
b0585	Increase Cecil 138 kV capacitor size to 44 MVAR, replace five 138 kV breakers at Cecil due to increased short circuit fault duty as a result of the addition of the Prexy substation	APS (100%)
b0586	Increase Whiteley 138 kV capacitor size to 44 MVAR	APS (100%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0587	Reconductor AP portion of Tidd – Carnegie 138 kV and Carnegie – Weirton 138 kV with 954 ACSR	APS (100%)
b0588	Install a 40.8 MVAR 138 kV capacitor at Grassy Falls	APS (100%)
b0589	Replace five 138 kV breakers at Cecil	APS (100%)
b0590	Replace #1 and #2 breakers at Charleroi 138 kV	APS (100%)
b0591	Install a 25.2 MVAR capacitor at Seneca Caverns 138 kV	APS (100%)
b0673	Rebuild Elko – Carbon Center Junction using 230 kV construction	APS (100%)
b0674	Construct new Osage – Whiteley 138 kV circuit	APS (97.69%) / DL (0.96%) / PENELEC (1.09%) / PSEG (0.25%) / RE (0.01%)
b0674.1	Replace the Osage 138 kV breaker ‘CollinsF126’	APS (100%)
b0675.1	Convert Monocacy - Walkersville 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.2	Convert Walkersville - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.3	Convert Ringgold - Catoctin 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.4	Convert Catoctin - Carroll 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.5	Convert portion of Ringgold Substation from 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.6	Convert Catoctin Substation from 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.7	Convert portion of Carroll Substation from 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0675.8	Convert Monocacy Substation from 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.9	Convert Walkersville Substation from 138 kV to 230 kV	AEC (1.02%) / APS (82.01%) / DPL (0.85%) / JCPL (1.75%) / ME (6.38%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%)
b0676.1	Reconductor Doubs - Lime Kiln (#207) 230kV	AEC (0.64%) / APS (86.77%) / DPL (0.53%) / JCPL (1.93%) / ME (4.05%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%)
b0676.2	Reconductor Doubs - Lime Kiln (#231) 230kV	AEC (0.64%) / APS (86.77%) / DPL (0.53%) / JCPL (1.93%) / ME (4.05%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%)
b0677	Reconductor Double Toll Gate – Riverton with 954 ACSR	APS (100%)
b0678	Reconductor Glen Falls - Oak Mound 138kV with 954 ACSR	APS (100%)
b0679	Reconductor Grand Point – Letterkenny with 954 ACSR	APS (100%)
b0680	Reconductor Greene – Letterkenny with 954 ACSR	APS (100%)
b0681	Replace 600/5 CT's at Franklin 138 kV	APS (100%)
b0682	Replace 600/5 CT's at Whiteley 138 kV	APS (100%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0684	Reconductor Guilford – South Chambersburg with 954 ACSR	APS (100%)
b0685	Replace Ringgold 230/138 kV #3 with larger transformer	APS (72.06%) / JCPL (4.18%) / ME (6.80%) / NEPTUNE* (0.38%) / PECO (4.06%) / PENELEC (5.89%) / PSEG (6.38%) / RE (0.25%)
b0704	Install a third Cabot 500/138 kV transformer	APS (74.36%) / DL (2.73%) PENELEC (22.91%)
b0797	Advance n0321 (Replace Doubs Circuit Breaker DJ2)	APS(100%)
b0798	Advance n0322 (Replace Doubs Circuit Breaker DJ3)	APS(100%)
b0799	Advance n0323 (Replace Doubs Circuit Breaker DJ6)	APS(100%)
b0800	Advance n0327 (Replace Doubs Circuit Breaker DJ16)	APS(100%)
b0941	Replace Opequon 138 kV breaker 'BUSTIE'	APS(100%)
b0942	Replace Butler 138 kV breaker '#1 BANK'	APS(100%)
b0943	Replace Butler 138 kV breaker '#2 BANK'	APS(100%)
b0944	Replace Yukon 138 kV breaker 'Y-8'	APS(100%)
b0945	Replace Yukon 138 kV breaker 'Y-3'	APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0946	Replace Yukon 138 kV breaker 'Y-1'		APS(100%)
b0947	Replace Yukon 138 kV breaker 'Y-5'		APS(100%)
b0948	Replace Yukon 138 kV breaker 'Y-2'		APS(100%)
b0949	Replace Yukon 138 kV breaker 'Y-19'		APS(100%)
b0950	Replace Yukon 138 kV breaker 'Y-4'		APS(100%)
b0951	Replace Yukon 138 kV breaker 'Y-9'		APS(100%)
b0952	Replace Yukon 138 kV breaker 'Y-11'		APS(100%)
b0953	Replace Yukon 138 kV breaker 'Y-13'		APS(100%)
b0954	Replace Charleroi 138 kV breaker '#1 XFMR BANK'		APS(100%)
b0955	Replace Yukon 138 kV breaker 'Y-7'		APS(100%)
b0956	Replace Pruntytown 138 kV breaker 'P-9'		APS(100%)
b0957	Replace Pruntytown 138 kV breaker 'P-12'		APS(100%)
b0958	Replace Pruntytown 138 kV breaker 'P-15'		APS(100%)

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**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0959 Replace Charleroi 138 kV breaker '#2 XFMR BANK'		APS(100%)
b0960 Replace Pruntytown 138 kV breaker 'P-2'		APS(100%)
b0961 Replace Pruntytown 138 kV breaker 'P-5'		APS(100%)
b0962 Replace Yukon 138 kV breaker 'Y-18'		APS(100%)
b0963 Replace Yukon 138 kV breaker 'Y-10'		APS(100%)
b0964 Replace Pruntytown 138 kV breaker 'P-11'		APS(100%)
b0965 Replace Springdale 138 kV breaker '138E'		APS(100%)
b0966 Replace Pruntytown 138 kV breaker 'P-8'		APS(100%)
b0967 Replace Pruntytown 138 kV breaker 'P-14'		APS(100%)
b0968 Replace Ringgold 138 kV breaker '#3 XFMR BANK'		APS(100%)
b0969 Replace Springdale 138 kV breaker '138C'		APS(100%)
b0970 Replace Rivesville 138 kV breaker '#8 XFMR BANK'		APS(100%)
b0971 Replace Springdale 138 kV breaker '138F'		APS(100%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0972	Replace Belmont 138 kV breaker 'B-16'		APS(100%)
b0973	Replace Springdale 138 kV breaker '138G'		APS(100%)
b0974	Replace Springdale 138 kV breaker '138V'		APS(100%)
b0975	Replace Armstrong 138 kV breaker 'BROOKVILLE'		APS(100%)
b0976	Replace Springdale 138 kV breaker '138P'		APS(100%)
b0977	Replace Belmont 138 kV breaker 'B-17'		APS(100%)
b0978	Replace Springdale 138 kV breaker '138U'		APS(100%)
b0979	Replace Springdale 138 kV breaker '138D'		APS(100%)
b0980	Replace Springdale 138 kV breaker '138R'		APS(100%)
b0981	Replace Yukon 138 kV breaker 'Y-12'		APS(100%)
b0982	Replace Yukon 138 kV breaker 'Y-17'		APS(100%)
b0983	Replace Yukon 138 kV breaker 'Y-14'		APS(100%)
b0984	Replace Rivesville 138 kV breaker '#10 XFMR BANK'		APS(100%)
b0985	Replace Belmont 138 kV breaker 'B-14'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0986	Replace Armstrong 138 kV breaker 'RESERVE BUS'		APS(100%)
b0987	Replace Yukon 138 kV breaker 'Y-16'		APS(100%)
b0988	Replace Springdale 138 kV breaker '138T'		APS(100%)
b0989	Replace Edgelawn 138 kV breaker 'GOFF RUN #632'		APS(100%)
b0990	Change reclosing on Cabot 138 kV breaker 'C-9'		APS(100%)
b0991	Change reclosing on Belmont 138 kV breaker 'B-7'		APS(100%)
b0992	Change reclosing on Belmont 138 kV breaker 'B-12'		APS(100%)
b0993	Change reclosing on Belmont 138 kV breaker 'B-9'		APS(100%)
b0994	Change reclosing on Belmont 138 kV breaker 'B-19'		APS(100%)
b0995	Change reclosing on Belmont 138 kV breaker 'B-21'		APS(100%)
b0996	Change reclosing on Willow Island 138 kV breaker 'FAIRVIEW #84'		APS(100%)
b0997	Change reclosing on Cabot 138 kV breaker 'C-4'		APS(100%)
b0998	Change reclosing on Cabot 138 kV breaker 'C-1'		APS(100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0999	Replace Redbud 138 kV breaker 'BUS TIE'		APS(100%)
b1022.1	Reconfigure the Peters to Bethel Park 138 kV line and Elrama to Woodville 138 kV line to create a 138 kV path from Woodville to Peters and a 138 kV path from Elrama to Bethel Park		APS (96.98%) / DL (3.02%)
b1022.3	Add static capacitors at Smith 138 kV		APS (96.98%) / DL (3.02%)
b1022.4	Add static capacitors at North Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.5	Add static capacitors at South Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.6	Add static capacitors at Manifold 138 kV		APS (96.98%) / DL (3.02%)
b1022.7	Add static capacitors at Houston 138 kV		APS (96.98%) / DL (3.02%)
b1023.1	Install a 500/138 kV transformer at 502 Junction		APS (100%)
b1023.2	Construct a new Franklin - 502 Junction 138 kV line including a rebuild of the Whiteley - Franklin 138 kV line to double circuit		APS (100%)
b1023.3	Construct a new 502 Junction - Osage 138 kV line		APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1023.4	Construct Braddock 138 kV breaker station that connects the Charleroi - Gordon 138 kV line, Washington - Franklin 138 kV line and the Washington - Vanceville 138 kV line including a 66 MVAR capacitor	APS (100%)
b1027	Increase the size of the shunt capacitors at Enon 138 kV	APS (100%)
b1028	Raise three structures on the Osage - Collins Ferry 138 kV line to increase the line rating	APS (100%)
b1128	Reconductor the Edgewater – Vasco Tap; Edgewater – Loyalhanna 138 kV lines with 954 ACSR	APS (100%)
b1129	Reconductor the East Waynesboro – Ringgold 138 kV line with 954 ACSR	APS (100%)
b1131	Upgrade Double Tollgate – Meadowbrook MDT Terminal Equipment	APS (100%)
b1132	Upgrade Double Tollgate-Meadowbrook MBG terminal equipment	APS (100%)
b1133	Upgrade terminal equipment at Springdale	APS (100%)
b1135	Reconductor the Bartonville – Meadowbrook 138 kV line with high temperature conductor	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1137 Reconductor the Eastgate – Luxor 138 kV; Eastgate – Sony 138 kV line with 954 ACSR		APS (78.77%) / PENELEC (14.11%) / PSEG (6.85%) / RE (0.27%)
b1138 Reconductor the King Farm – Sony 138 kV line with 954 ACSR		APS (100%)
b1139 Reconductor the Yukon – Waltz Mills 138 kV line with high temperature conductor		APS (100%)
b1140 Reconductor the Bracken Junction – Luxor 138 kV line with 954 ACSR		APS (100%)
b1141 Reconductor the Sewickley – Waltz Mills Tap 138 kV line with high temperature conductor		APS (100%)
b1142 Reconductor the Bartonsville – Stephenson 138 kV; Stonewall – Stephenson 138 kV line with 954 ACSR		APS (100%)
b1143 Reconductor the Youngwood – Yukon 138 kV line with high temperature conductor		APS (89.92%) / PENELEC (10.08%)
b1144 Reconductor the Bull Creek Junction – Cabot 138 kV line with high temperature conductor		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1145	Reconductor the Lawson Junction – Cabot 138 kV line with high temperature conductor		APS (100%)
b1146	Replace Layton - Smithton #61 138 kV line structures to increase line rating		APS (100%)
b1147	Replace Smith – Yukon 138 kV line structures to increase line rating		APS (100%)
b1148	Reconductor the Loyalhanna – Luxor 138 kV line with 954 ACSR		APS (100%)
b1149	Reconductor the Luxor – Stony Springs Junction 138 kV line with 954 ACSR		APS (100%)
b1150	Upgrade terminal equipment at Social Hall		APS (100%)
b1151	Reconductor the Greenwood – Redbud 138 kV line with 954 ACSR		APS (100%)
b1152	Reconductor Grand Point – South Chambersburg		APS (100%)
b1159	Replace Peters 138 kV breaker ‘Bethel P OCB’		APS (100%)
b1160	Replace Peters 138 kV breaker ‘Cecil OCB’		APS (100%)
b1161	Replace Peters 138 kV breaker ‘Union JctOCB’		APS (100%)
b1162	Replace Double Toll Gate 138 kV breaker ‘DRB-2’		APS (100%)
b1163	Replace Double Toll Gate 138 kV breaker ‘DT 138 kV OCB’		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1164	Replace Cecil 138 kV breaker 'Enlow OCB'		APS (100%)
b1165	Replace Cecil 138 kV breaker 'South Fayette'		APS (100%)
b1166	Replace Wylie Ridge 138 kV breaker 'W-9'		APS (100%)
b1167	Replace Reid 138 kV breaker 'RI-2'		APS (100%)
b1171.1	Install the second Black Oak 500/138 kV transformer, two 138 kV breaker, and related substation work		BGE (20.76%) / DPL (3.14%) / Dominion (39.55%) / ME (2.71%) / PECO (3.36%) / PEPCO (30.48%)
b1171.3	Install six 500 kV breakers and remove BOL1 500 kV breaker at Black Oak		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b1200	Reconductor Double Toll Gate – Greenwood 138 kV with 954 ACSR conductor		APS (100%)
b1221.1	Convert Carbon Center from 138 kV to a 230 kV ring bus		APS (100%)
b1221.2	Construct Bear Run 230 kV substation with 230/138 kV transformer		APS (100%)

\*Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1221.3	Loop Carbon Center Junction – Williamette line into Bear Run	APS (100%)
b1221.4	Carbon Center – Carbon Center Junction & Carbon Center Junction – Bear Run conversion from 138 kV to 230 kV	APS (100%)
b1230	Reconductor Willow-Eureka & Eureka-St Mary 138 kV lines	APS (100%)
b1232	Reconductor Nipetown – Reid 138 kV with 1033 ACCR	AEC (1.40%) / APS (75.74%) / DPL (1.92%) / JCPL (2.92%) / ME (6.10%) / Neptune (0.27%) / PECO (4.40%) / PENELEC (3.26%) / PPL (3.99%)
b1233.1	Upgrade terminal equipment at Washington	APS (100%)
b1234	Replace structures between Ridgeway and Paper city	APS (100%)
b1235	Reconductor the Albright – Black Oak AFA 138 kV line with 795 ACSS/TW	APS (30.25%) / BGE (16.10%) / Dominion (30.51%) / PEPCO (23.14%)
b1237	Upgrade terminal equipment at Albright, replace bus and line side breaker disconnects and leads, replace breaker risers, upgrade RTU and line	APS (100%)
b1238	Install a 138 kV 44 MVAR capacitor at Edgelawn substation	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1239	Install a 138 kV 44 MVAR capacitor at Ridgeway substation	APS (100%)
b1240	Install a 138 kV 44 MVAR capacitor at Elko Substation	APS (100%)
b1241	Upgrade terminal equipment at Washington substation on the GE Plastics/DuPont terminal	APS (100%)
b1242	Replace structures between Collins Ferry and West Run	APS (100%)
b1243	Install a 138 kV capacitor at Potter Substation	APS (100%)
b1261	Replace Butler 138 kV breaker '1-2 BUS 138'	APS (100%)
b1383	Install 2nd 500/138 kV transformer at 502 Junction	APS (93.27%) / DL (5.39%) / PENELEC (1.34%)
b1384	Reconductor approximately 2.17 miles of Bedington – Shepherdstown 138 kV with 954 ACSR	APS (100%)
b1385	Reconductor Halfway – Paramount 138 kV with 1033 ACCR	APS (100%)
b1386	Reconductor Double Tollgate – Meadow Brook 138 kV ckt 2 with 1033 ACCR	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1387	Reconductor Double Tollgate – Meadow Brook 138 kV	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1388	Reconductor Feagans Mill – Millville 138 kV with 954 ACSR	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1389	Reconductor Bens Run – St. Mary’s 138 kV with 954 ACSR		AEP (12.40%) / APS (17.80%) / DL (69.80%)
b1390	Replace Bus Tie Breaker at Opequon		APS (100%)
b1391	Replace Line Trap at Gore		APS (100%)
b1392	Replace structure on Belmont – Trissler 138 kV line		APS (100%)
b1393	Replace structures Kingwood – Pruntytown 138 kV line		APS (100%)
b1395	Upgrade Terminal Equipment at Kittanning		APS (100%)
b1401	Change reclosing on Pruntytown 138 kV breaker ‘P-16’ to 1 shot at 15 seconds		APS (100%)
b1402	Change reclosing on Rivesville 138 kV breaker ‘Pruntytown #34’ to 1 shot at 15 seconds		APS (100%)
b1403	Change reclosing on Yukon 138 kV breaker ‘Y21 Shepler’ to 1 shot at 15 seconds		APS (100%)
b1404	Replace the Kiski Valley 138 kV breaker ‘Vandergrift’ with a 40 kA breaker		APS (100%)
b1405	Change reclosing on Armstrong 138 kV breaker ‘GARETTRJCT’ at 1 shot at 15 seconds		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1406	Change reclosing on Armstrong 138 kV breaker 'KITTANNING' to 1 shot at 15 seconds		APS (100%)
b1407	Change reclosing on Armstrong 138 kV breaker 'BURMA' to 1 shot at 15 seconds		APS (100%)
b1408	Replace the Weirton 138 kV breaker 'Tidd 224' with a 40 kA breaker		APS (100%)
b1409	Replace the Cabot 138 kV breaker 'C9 Kiski Valley' with a 40 kA breaker		APS (100%)
b1507.2	Terminal Equipment upgrade at Doubs substation		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> APS (25.20%) / BGE (10.49%) / Dominion (52.48%) / PEPCO (11.83%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1507.3	Mt. Storm – Doubs transmission line rebuild in Maryland – Total line mileage for APS is 2.71 miles		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> APS (25.20%) / BGE (10.49%) / Dominion (52.48%) / PEPCO (11.83%)
b1510	Install 59.4 MVAR capacitor at Waverly		APS (100%)
b1672	Install a 230 kV breaker at Carbon Center		APS (100%)
b0539	Replace Doubs circuit breaker DJ11		APS (100%)
b0540	Replace Doubs circuit breaker DJ12		APS (100%)
b0541	Replace Doubs circuit breaker DJ13		APS (100%)
b0542	Replace Doubs circuit breaker DJ20		APS (100%)
b0543	Replace Doubs circuit breaker DJ21		APS (100%)
b0544	Remove instantaneous reclose from Eastalco circuit breaker D-26		APS (100%)

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b0545	Remove instantaneous reclose from Eastalco circuit breaker D-28		APS (100%)
b0559	Install 200 MVAR capacitor at Meadow Brook 500 kV substation		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)
b0560	Install 250 MVAR capacitor at Kemptown 500 kV substation		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1803	Build a 300 MVAR Switched Shunt at Doubs 500 kV and increase (~50 MVAR) in size the existing Switched Shunt at Doubs 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (25.20%) / BGE (10.49%) / Dominion (52.48%) / PEPCO (11.83%)</p>
b1804	Install a new 600 MVAR SVC at Meadowbrook 500kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)</p>
b1816.1	Replace relaying at the Mt. Airy substation on the Carroll - Mt. Airy 230 kV line	APS (100%)

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1816.2	Adjust the control settings of all existing capacitors at Mt Airy 34.5kV, Monocacy 138kV, Ringgold 138kV served by Potomac Edison's Eastern 230 kV network to ensure that all units will be on during the identified N-1-1 contingencies		APS (100%)
b1816.3	Replace existing unidirectional LTC controller on the No. 4, 230/138 kV transformer at Carroll substation with a bidirectional unit		APS (100%)
b1816.4	Isolate and bypass the 138 kV reactor at Germantown Substation		APS (100%)
b1816.6	Replace 336.4 ACSR conductor on the Catocin - Carroll 138 kV line using 556.5 ACSR (26/7) or equivalent on existing structures (12.7 miles), 800 A wave traps at Carroll and Catocin with 1200 A units, and 556.5 ACSR SCCIR (Sub-conductor) line risers and bus traps with 795 ACSR or equivalent		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b1822	Replace the 1200 A wave trap, line risers, breaker risers with 1600 A capacity terminal equipment at Reid 138 kV SS		APS (100%)
b1823	Replace the 800 A wave trap with a 1200 A wave trap at Millville 138 kV substation		APS (100%)
b1824	Reconductor Grant Point - Guilford 138kV line approximately 8 miles of 556 ACSR with 795 ACSR		APS (100%)
b1825	Replace the 800 Amp line trap at Butler 138 kV Sub on the Cabot East 138 kV line		APS (100%)
b1826	Change the CT ratio at Double Toll Gate 138 kV SS on MDT line		APS (100%)
b1827	Change the CT ratio at Double Toll Gate 138 kV SS on MBG line		APS (100%)
b1828.1	Reconductor the Bartonville – Stephenson 3.03 mile 138 kV line of 556 ACSR with 795 ACSR		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1828.2	Reconductor the Stonewall – Stephenson 2.08 mile 138 kV line of 556 ACSR with 795 ACSR	APS (100%)
b1829	Replace the existing 138 kV 556.5 ACSR substation conductor risers with 954 ACSR at the Redbud 138 kV substation, including but not limited to the line side disconnect leads	APS (100%)
b1830	Replace 1200 A wave trap and 1024 ACAR breaker risers at Halfway 138 kV substation, and replace 1024 ACAR breaker risers at Paramount 138 kV substation	APS (100%)
b1832	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 1 (207) 230 kV line terminal	APS (100%)
b1833	Replace the 1200 A line side and bus side disconnect switches with 1600 A switches, replace bus side, line side, and disconnect leads at Lime Kiln SS on the Doubs - Lime Kiln 2 (231) 230 kV line terminal	APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1835	Reconductor 14.3 miles of 556 ACSR with 795 ACSR from Old Chapel to Millville 138 kV and upgrade line risers at Old Chapel 138 kV and Millville 138 kV and replace 1200 A wave trap at Millville 138 kV	APS (37.68%) / Dominion (34.46%) / PEPCO (13.69%) / BGE (11.45%) / ME (2.01%) / PENELEC (0.53%) / DL (0.18%)
b1836	Replace 1200 A wave trap with 1600 A wave trap at Reid 138 kV SS	APS (100%)
b1837	Replace 750 CU breaker risers with 795 ACSR at Marlowe 138 kV and replace 1200 A wave traps with 1600 A wave traps at Marlowe 138 kV and Bedington 138 kV	APS (100%)
b1838	Replace the 1200 A Bedington 138 kV line air switch and the 1200 A 138 kV bus tie air switch at Nipetown 138 kV with 1600 A switches	APS (100%)
b1839	Install additional 33 MVAR capacitors at Grand Point 138 kV SS and Guildford 138 kV SS	APS (100%)

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1840	Construct a 138 kV line between Buckhannon and Weston 138 kV substations	APS (100%)
b1902	Replace line trap at Stonewall on the Stephenson 138 kV line terminal	APS (100%)
b1941	Loop the Homer City-Handsome Lake 345 kV line into the Armstrong substation and install a 345/138 kV transformer at Armstrong	APS (67.86%) / PENELEC (32.14%)
b1942	Change the CT ratio at Millville to improve the Millville – Old Chapel 138 kV line ratings	APS (100%)
b1964	Convert Moshannon substation to a 4 breaker 230 kV ring bus	APS (41.06%) / DPL (6.68%) / JCPL (5.48%) / ME (10.70%) / Neptune* (0.53%) / PECO (15.53%) / PPL (20.02%)
b1965	Install a 44 MVAR 138 kV capacitor at Luxor substation	APS (100%)
b1986	Upgrade the AP portion of the Elrama – Mitchell 138 kV line by replace breaker risers on the Mitchell 138 kV bus on the Elrama terminal	APS (100%)
b1987	Reconductor the Osage-Collins Ferry 138 kV line with 795 ACSS. Upgrade terminal equipment at Osage and Collins Ferry	APS (100%)



**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1988	Raise structures between Lake Lynn and West Run to eliminate the clearance de-rates on the West Run – Lake Lynn 138 kV line	APS (100%)
b1989	Raise structures between Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line	APS (100%)
b2095	Replace Weirt 138 kV breaker 'S-TORONTO226' with 63kA rated breaker	APS (100%)
b2096	Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'	APS (100%)
b2097	Replace Ridgeley 138 kV breaker '#2 XFMR OCB'	APS (100%)
b2098	Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker	APS (100%)
b2099	Revise the reclosing of Ridgeley 138 kV breaker 'RC1'	APS (100%)
b2100	Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker	APS (100%)
b2101	Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker	APS (100%)
b2102	Replace Armstrong 138 kV breaker 'GARETTRJCT' with 40kA rated breaker	APS (100%)

\* Neptune Regional Transmission System, LLC

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2103	Replace Armstrong 138 kV breaker 'BURMA' with 40kA rated breaker		APS (100%)
b2104	Replace Armstrong 138 kV breaker 'KITANNING' with 40kA rated breaker		APS (100%)
b2105	Replace Armstrong 138 kV breaker 'KISSINGERJCT' with 40kA rated breaker		APS (100%)
b2106	Replace Wylie Ridge 345 kV breaker 'WK-1' with 63kA rated breaker		APS (100%)
b2107	Replace Wylie Ridge 345 kV breaker 'WK-2' with 63kA rated breaker		APS (100%)
b2108	Replace Wylie Ridge 345 kV breaker 'WK-3' with 63kA rated breaker		APS (100%)
b2109	Replace Wylie Ridge 345 kV breaker 'WK-4' with 63kA rated breaker		APS (100%)
b2110	Replace Wylie Ridge 345 kV breaker 'WK-6' with 63kA rated breaker		APS (100%)
b2111	Replace Wylie Ridge 138 kV breaker 'WK-7' with 63kA rated breaker		APS (100%)
b2112	Replace Wylie Ridge 345 kV breaker 'WK-5'		APS (100%)
b2113	Replace Weirton 138 kV breaker 'NO 6 XFMR' with 63kA rated breaker		APS (100%)
b2114	Replace Armstrong 138 kV breaker 'Bus-Tie' (Status On-Hold pending retirement)		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2124.1	Add a new 138 kV line exit		APS (100%)
b2124.2	Construct a 138 kV ring bus and install a 138/69 kV autotransformer		APS (100%)
b2124.3	Add new 138 kV line exit and install a 138/25 kV transformer		APS (100%)
b2124.4	Construct approximately 5.5 miles of 138 kV line		APS (100%)
b2124.5	Convert approximately 7.5 miles of 69 kV to 138 kV		APS (100%)
b2156	Install a 75 MVAR 230 kV capacitor at Shingletown Substation		APS (100%)
b2165	Replace 800A wave trap at Stonewall with a 1200 A wave trap		APS (100%)
b2166	Reconductor the Millville – Sleepy Hollow 138kV 4.25 miles of 556 ACSR with 795 ACSR, upgrade line risers at Sleepy Hollow, and change 1200 A CT tap at Millville to 800		APS (100%)
b2168	For Grassy Falls 138kV Capacitor bank adjust turn-on voltage to 1.0pu with a high limit of 1.04pu, For Crupperneck and Powell Mountain 138kV Capacitor Banks adjust turn-on voltage to 1.01pu with a high limit of 1.035pu		APS (100%)

**Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2169	Replace/Raise structures on the Yukon-Smithton 138 kV line section to eliminate clearance de-rate	APS (100%)
b2170	Replace/Raise structures on the Smithton-Shepler Hill Jct 138 kV line section to eliminate clearance de-rate	APS (100%)
b2171	Replace/Raise structures on the Parsons-William 138 kV line section to eliminate clearance de-rate	APS (100%)
b2172	Replace/Raise structures on the Parsons - Loughs Lane 138 kV line section to eliminate clearance de-rate	APS (100%)

## SCHEDULE 12 – APPENDIX

- (17) **AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0318	Install a 765/138 kV transformer at Amos	AEP (99.00%) / PEPCO (1.00%)
b0324	Replace entrance conductors, wave traps, and risers at the Tidd 345 kV station on the Tidd – Canton Central 345 kV circuit	AEP (100%)
b0447	Replace Cook 345 kV breaker M2	AEP (100%)
b0448	Replace Cook 345 kV breaker N2	AEP (100%)
b0490	Construct an Amos – Bedington 765 kV circuit (AEP equipment)	As specified under the procedures detailed in Attachment H-19B
		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</p>

\* Neptune Regional Transmission System, LLC

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.2	Replace Amos 138 kV breaker 'B'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</p>
b0490.3	Replace Amos 138 kV breaker 'B1'	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</p>

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.4	Replace Amos 138 kV breaker 'C'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)
b0490.5	Replace Amos 138 kV breaker 'C1'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)

\* Neptune Regional Transmission System, LLC

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.6	Replace Amos 138 kV breaker 'D'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)
b0490.7	Replace Amos 138 kV breaker 'D2'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0490.8	Replace Amos 138 kV breaker 'E'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)
b0490.9	Replace Amos 138 kV breaker 'E2'	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0504 Add two advanced technology circuit breakers at Hanging Rock 765 kV to improve operational performance		<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEP (100%)</p>
b0570 Reconductor East Side Lima – Sterling 138 kV		AEP (41.99%) / ComEd (58.01%)
b0571 Reconductor West Millersport – Millersport 138 kV		AEP (73.83%) / ComEd (19.26%) / Dayton (6.91%)
b0748 Establish a new 69 kV circuit between the Canal Road and East Wooster stations, establish a new 69 kV circuit between the West Millersburg and Moreland Switch stations (via Shreve), add reactive support via cap banks		AEP (100%)
b0838 Hazard Area 138 kV and 69 kV Improvement Projects		AEP (100%)
b0839 Replace existing 450 MVA transformer at Twin Branch 345 / 138 kV with a 675 MVA transformer		AEP (99.73%) / Dayton (0.27%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0840	String a second 138 kV circuit on the open tower position between Twin Branch and East Elkhart	AEP (100%)
b0840.1	Establish a new 138/69-34.5kV Station to interconnect the existing 34.5kV network	AEP (100%)
b0917	Replace Baileysville 138 kV breaker 'P'	AEP (100%)
b0918	Replace Riverview 138 kV breaker '634'	AEP (100%)
b0919	Replace Torrey 138 kV breaker 'W'	AEP (100%)
b1032.1	Construct a new 345/138kV station on the Marquis-Bixby 345kV line near the intersection with Ross - Highland 69kV	AEP (89.97%) / Dayton (10.03%)
b1032.2	Construct two 138kV outlets to Delano 138kV station and to Camp Sherman station	AEP (89.97%) / Dayton (10.03%)
b1032.3	Convert Ross - Circleville 69kV to 138kV	AEP (89.97%) / Dayton (10.03%)
b1032.4	Install 138/69kV transformer at new station and connect in the Ross - Highland 69kV line	AEP (89.97%) / Dayton (10.03%)
b1033	Add a third delivery point from AEP's East Danville Station to the City of Danville.	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.1	Establish new South Canton - West Canton 138kV line (replacing Torrey - West Canton) and Wagenhals - Wayview 138kV	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.2	Loop the existing South Canton - Wayview 138kV circuit in-and-out of West Canton	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.3	Install a 345/138kV 450 MVA transformer at Canton Central	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.4	Rebuild/reconductor the Sunnyside - Torrey 138kV line	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.5	Disconnect/eliminate the West Canton 138kV terminal at Torrey Station	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.6	Replace all 138kV circuit breakers at South Canton Station and operate the station in a breaker and a half configuration	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1034.7	Replace all obsolete 138kV circuit breakers at the Torrey and Wagenhals stations	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1034.8	Install additional 138kV circuit breakers at the West Canton, South Canton, Canton Central, and Wagenhals stations to accommodate the new circuits	AEP (96.01%) / APS (0.62%) / ComEd (0.19%) / Dayton (0.44%) / DL (0.13%) / PENELEC (2.61%)
b1035	Establish a third 345kV breaker string in the West Millersport Station. Construct a new West Millersport – Gahanna 138kV circuit. Miscellaneous improvements to 138kV transmission system.	AEP (100%)
b1036	Upgrade terminal equipment at Poston Station and update remote end relays	AEP (100%)
b1037	Sag check Bonsack–Cloverdale 138 kV, Cloverdale–Centerville 138kV, Centerville–Ivy Hill 138kV, Ivy Hill–Reusens 138kV, Bonsack–Reusens 138kV and Reusens–Monel–Gomingo–Joshua Falls 138 kV.	AEP (100%)
b1038	Check the Crooksville - Muskingum 138 kV sag and perform the required work to improve the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1039	Perform a sag study for the Madison – Cross Street 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1040	Rebuild an 0.065 mile section of the New Carlisle – Olive 138 kV line and change the 138 kV line switches at New Carlisle	AEP (100%)
b1041	Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating	AEP (100%)
b1042	Perform sag studies to raise the emergency rating of Amos – Poca 138kV	AEP (100%)
b1043	Perform sag studies to raise the emergency rating of Turner - Ruth 138kV	AEP (100%)
b1044	Perform sag studies to raise the emergency rating of Kenova – South Point 138kV	AEP (100%)
b1045	Perform sag studies of Tri State - Darrah 138 kV	AEP (100%)
b1046	Perform sag study of Scottsville – Bremono 138kV to raise the emergency rating	AEP (100%)
b1047	Perform sag study of Otter Switch - Altavista 138kV to raise the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1048	Reconductor the Bixby - Three C - Groves and Bixby - Groves 138 kV tower line	AEP (100%)
b1049	Upgrade the risers at the Riverside station to increase the rating of Benton Harbor – Riverside 138kV	AEP (100%)
b1050	Rebuilding and reconductor the Bixby – Pickerington Road - West Lancaster 138 kV line	AEP (100%)
b1051	Perform a sag study for the Kenzie Creek – Pokagon 138 kV line and perform the required work to improve the emergency rating	AEP (100%)
b1052	Unsix-wire the existing Hyatt - Sawmill 138 kV line to form two Hyatt - Sawmill 138 kV circuits	AEP (100%)
b1053	Perform a sag study and remediation of 32 miles between Claytor and Matt Funk.	AEP (100%)
b1091	Add 28.8 MVAR 138 kV capacitor bank at Huffman and 43.2 MVAR 138 kV Bank at Jubal Early and 52.8 MVAR 138 kV Bank at Progress Park Stations	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1092	Add 28.8 MVAR 138 kV capacitor bank at Sullivan Gardens and 52.8 MVAR 138 kV Bank at Reedy Creek Stations	AEP (100%)
b1093	Add a 43.2 MVAR capacitor bank at the Morgan Fork 138 kV Station	AEP (100%)
b1094	Add a 64.8 MVAR capacitor bank at the West Huntington 138 kV Station	AEP (100%)
b1108	Replace Ohio Central 138 kV breaker 'C2'	AEP (100%)
b1109	Replace Ohio Central 138 kV breaker 'D1'	AEP (100%)
b1110	Replace Sporn A 138 kV breaker 'J'	AEP (100%)
b1111	Replace Sporn A 138 kV breaker 'J2'	AEP (100%)
b1112	Replace Sporn A 138 kV breaker 'L'	AEP (100%)
b1113	Replace Sporn A 138 kV breaker 'L1'	AEP (100%)
b1114	Replace Sporn A 138 kV breaker 'L2'	AEP (100%)
b1115	Replace Sporn A 138 kV breaker 'N'	AEP (100%)
b1116	Replace Sporn A 138 kV breaker 'N2'	AEP (100%)
b1227	Perform a sag study on Altavista – Leesville 138 kV circuit	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1231 Replace the existing 138/69-12 kV transformer at West Moulton Station with a 138/69 kV transformer and a 69/12 kV transformer		AEP (96.69%) / Dayton (3.31%)
b1375 Replace Roanoke 138 kV breaker 'T'		AEP (100%)
b1376 Replace Roanoke 138 kV breaker 'E'		AEP (100%)
b1377 Replace Roanoke 138 kV breaker 'F'		AEP (100%)
b1378 Replace Roanoke 138 kV breaker 'G'		AEP (100%)
b1379 Replace Roanoke 138 kV breaker 'B'		AEP (100%)
b1380 Replace Roanoke 138 kV breaker 'A'		AEP (100%)
b1381 Replace Olive 345 kV breaker 'E'		AEP (100%)
b1382 Replace Olive 345 kV breaker 'R2'		AEP (100%)
b1416 Perform a sag study on the Desoto – Deer Creek 138 kV line to increase the emergency rating		AEP (100%)
b1417 Perform a sag study on the Delaware – Madison 138 kV line to increase the emergency rating		AEP (100%)
b1418 Perform a sag study on the Rockhill – East Lima 138 kV line to increase the emergency rating		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1419 Perform a sag study on the Findlay Center – Fostoria Ctl 138 kV line to increase the emergency rating		AEP (100%)
b1420 A sag study will be required to increase the emergency rating for this line. Depending on the outcome of this study, more action may be required in order to increase the rating		AEP (100%)
b1421 Perform a sag study on the Sorenson – McKinley 138 kV line to increase the emergency rating		AEP (100%)
b1422 Perform a sag study on John Amos – St. Albans 138 kV line to allow for operation up to its conductor emergency rating		AEP (100%)
b1423 A sag study will be performed on the Chemical – Capitol Hill 138 kV line to determine if the emergency rating can be utilized		AEP (100%)
b1424 Perform a sag study for Benton Harbor – West Street – Hartford 138 kV line to improve the emergency rating		AEP (100%)
b1425 Perform a sag study for the East Monument – East Danville 138 kV line to allow for operation up to the conductor’s maximum operating temperature		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1426	Perform a sag study for the Reusens – Graves 138 kV line to allow for operation up to the conductor’s maximum operating temperature	AEP (100%)
b1427	Perform a sag study on Smith Mountain – Leesville – Altavista – Otter 138 kV and on Boones – Forest – New London – JohnsMT – Otter	AEP (100%)
b1428	Perform a sag study on Smith Mountain – Candler’s Mountain 138 kV and Joshua Falls – Cloverdale 765 kV to allow for operation up to	AEP (100%)
b1429	Perform a sag study on Fremont – Clinch River 138 kV to allow for operation up to its conductor emergency ratings	AEP (100%)
b1430	Install a new 138 kV circuit breaker at Benton Harbor station and move the load from Watervliet 34.5 kV station to West street 138 kV	AEP (100%)
b1432	Perform a sag study on the Kenova – Tri State 138 kV line to allow for operation up to their conductor emergency rating	AEP (100%)
b1433	Replace risers in the West Huntington Station to increase the line ratings which would eliminate the overloads for the contingencies listed	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1434	Perform a sag study on the line from Desoto to Madison. Replace bus and risers at Daleville station and replace bus and risers at Madison	AEP (100%)
b1435	Replace the 2870 MCM ACSR riser at the Sporn station	AEP (100%)
b1436	Perform a sag study on the Sorenson – Illinois Road 138 kV line to increase the emergency MOT for this line. Replace bus and risers at Illinois Road	AEP (100%)
b1437	Perform sag study on Rock Cr. – Hummel Cr. 138 kV to increase the emergency MOT for the line, replace bus and risers at Huntington J., and replace relays for Hummel Cr. – Hunt – Soren. Line at Soren	AEP (100%)
b1438	Replacement of risers at McKinley and Industrial Park stations and performance of a sag study for the 4.53 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1439	By replacing the risers at Lincoln both the Summer Normal and Summer Emergency ratings will improve to 268 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1440	By replacing the breakers at Lincoln the Summer Emergency rating will improve to 251 MVA	AEP (100%)
b1441	Replacement of risers at South Side and performance of a sag study for the 1.91 miles of 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA	AEP (100%)
b1442	Replacement of 954 ACSR conductor with 1033 ACSR and performance of a sag study for the 4.54 miles of 2-636 ACSR section is expected	AEP (100%)
b1443	Station work at Thelma and Busseyville Stations will be performed to replace bus and risers	AEP (100%)
b1444	Perform electrical clearance studies on Clinch River – Clinchfield 139 kV line (a.k.a. sag studies) to determine if the emergency ratings can be utilized	AEP (100%)
b1445	Perform a sag study on the Addison (Buckeye CO-OP) – Thinever and North Crown City – Thivener 138 kV sag study and switch	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1446	Perform a sag study on the Parkersburg (Allegheny Power) – Belpre (AEP) 138 kV	AEP (100%)
b1447	Dexter – Elliot tap 138 kV sag check	AEP (100%)
b1448	Dexter – Meigs 138 kV Electrical Clearance Study	AEP (100%)
b1449	Meigs tap – Rutland 138 kV sag check	AEP (100%)
b1450	Muskingum – North Muskingum 138 kV sag check	AEP (100%)
b1451	North Newark – Sharp Road 138 kV sag check	AEP (100%)
b1452	North Zanesville – Zanesville 138 kV sag check	AEP (100%)
b1453	North Zanesville – Powelson and Ohio Central – Powelson 138 kV sag check	AEP (100%)
b1454	Perform an electrical clearance study on the Ross – Delano – Scioto Trail 138 kV line to determine if the emergency rating can be utilized	AEP (100%)
b1455	Perform a sag check on the Sunny – Canton Central – Wagenhals 138 kV line to determine if all circuits can be operated at their summer emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1456 The Tidd – West Bellaire 345 kV circuit has been de-rated to its normal rating and would need an electrical clearance study to determine if the emergency rating can be utilized		AEP (100%)
b1457 The Tiltonsville – Windsor 138 kV circuit has been derated to its normal rating and would need an electrical clearance study to determine if the emergency rating could be utilized		AEP (100%)
b1458 Install three new 345 kV breakers at Bixby to separate the Marquis 345 kV line and transformer #2. Operate Circleville – Harrison 138 kV and Harrison – Zuber 138 kV up to conductor emergency ratings		AEP (100%)
b1459 Several circuits have been de-rated to their normal conductor ratings and could benefit from electrical clearance studies to determine if the emergency rating could be utilized		AEP (100%)
b1460 Replace 2156 & 2874 risers		AEP (100%)
b1461 Replace meter, metering CTs and associated equipment at the Paden City feeder		AEP (100%)
b1462 Replace relays at both South Cadiz 138 kV and Tidd 138 kV		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1463	Reconductor the Bexley – Groves 138 kV circuit		AEP (100%)
b1464	Corner 138 kV upgrades		AEP (100%)
b1465.1	Add a 3rd 2250 MVA 765/345 kV transformer at Sullivan station		AEC (0.71%) / AEP (75.17%) / APS (1.25%) / BGE (1.81%) / ComEd (5.92%) / Dayton (0.86%) / DL (1.23%) / DPL (0.95%) / Dominion (3.90%) / JCPL (1.58%) / NEPTUNE (0.15%) / PECO (2.08%) / PEPCO (1.66%) / PSEG (2.63%) / RE (0.10%)
b1465.2	Replace the 100 MVAR 765 kV shunt reactor bank on Rockport – Jefferson 765 kV line with a 300 MVAR bank at Rockport Station		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1465.3	Transpose the Rockport – Sullivan 765 kV line and the Rockport – Jefferson 765 kV line	<div> <b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) </div> <div> <b>DFAX Allocation:</b>  AEP (100%) </div>
b1465.4	Make switching improvements at Sullivan and Jefferson 765 kV stations	<div> <b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) </div> <div> <b>DFAX Allocation:</b>  AEP (100%) </div>
b1466.1	Create an in and out loop at Adams Station by removing the hard tap that currently exists	AEP (100%)
b1466.2	Upgrade the Adams transformer to 90 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1466.3	At Seaman Station install a new 138 kV bus and two new 138 kV circuit breakers	AEP (100%)
b1466.4	Convert South Central Co-op's New Market 69 kV Station to 138 kV	AEP (100%)
b1466.5	The Seaman – Highland circuit is already built to 138 kV, but is currently operating at 69 kV, which would now increase to 138 kV	AEP (100%)
b1466.6	At Highland Station, install a new 138 kV bus, three new 138 kV circuit breakers and a new 138/69 kV 90 MVA transformer	AEP (100%)
b1466.7	Using one of the bays at Highland, build a 138 kV circuit from Hillsboro – Highland 138 kV, which is approximately 3 miles	AEP (100%)
b1467.1	Install a 14.4 MVar Capacitor Bank at New Buffalo station	AEP (100%)
b1467.2	Reconfigure the 138 kV bus at LaPorte Junction station to eliminate a contingency resulting in loss of two 138 kV sources serving the LaPorte area	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1468.1	Expand Selma Parker Station and install a 138/69/34.5 kV transformer	AEP (100%)
b1468.2	Rebuild and convert 34.5 kV line to Winchester to 69 kV, including Farmland Station	AEP (100%)
b1468.3	Retire the 34.5 kV line from Haymond to Selma Wire	AEP (100%)
b1469.1	Conversion of the Newcomerstown – Cambridge 34.5 kV system to 69 kV operation	AEP (100%)
b1469.2	Expansion of the Derwent 69 kV Station (including reconfiguration of the 69 kV system)	AEP (100%)
b1469.3	Rebuild 11.8 miles of 69 kV line, and convert additional 34.5 kV stations to 69 kV operation	AEP (100%)
b1470.1	Build a new 138 kV double circuit off the Kanawha – Bailyville #2 138 kV circuit to Skin Fork Station	AEP (100%)
b1470.2	Install a new 138/46 kV transformer at Skin Fork	AEP (100%)
b1470.3	Replace 5 Moab's on the Kanawha – Baileysville line with breakers at the Sundial 138 kV station	AEP (100%)
b1471	Perform a sag study on the East Lima – For Lima – Rockhill 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1472	Perform a sag study on the East Lima – Haviland 138 kV line to increase the emergency rating	AEP (100%)
b1473	Perform a sag study on the East New Concord – Muskingum River section of the Muskingum River – West Cambridge 138 kV circuit	AEP (100%)
b1474	Perform a sag study on the Ohio Central – Prep Plant tap 138 kV circuit	AEP (100%)
b1475	Perform a sag study on the S73 – North Delphos 138 kV line to increase the emergency rating	AEP (100%)
b1476	Perform a sag study on the S73 – T131 138 kV line to increase the emergency rating	AEP (100%)
b1477	The Natrium – North Martin 138 kV circuit would need an electrical clearance study among other equipment upgrades	AEP (100%)
b1478	Upgrade Strouds Run – Strouds Tap 138 kV relay and riser	AEP (100%)
b1479	West Hebron station upgrades	AEP (100%)
b1480	Perform upgrades and a sag study on the Corner – Layman 138 kV section of the Corner – Muskingum River 138 kV circuit	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1481	Perform a sag study on the West Lima – Eastown Road – Rockhill 138 kV line and replace the 138 kV risers at Rockhill station to increase the emergency rating	AEP (100%)
b1482	Perform a sag study for the Albion – Robison Park 138 kV line to increase its emergency rating	AEP (100%)
b1483	Sag study 1 mile of the Clinch River – Saltville 138 kV line and replace the risers and bus at Clinch River, Lebanon and Elk Garden Stations	AEP (100%)
b1484	Perform a sag study on the Hacienda – Harper 138 kV line to increase the emergency rating	AEP (100%)
b1485	Perform a sag study on the Jackson Road – Concord 183 kV line to increase the emergency rating	AEP (100%)
b1486	The Matt Funk – Poages Mill – Starkey 138 kV line requires	AEP (100%)
b1487	Perform a sag study on the New Carlisle – Trail Creek 138 kV line to increase the emergency rating	AEP (100%)
b1488	Perform a sag study on the Olive – LaPorte Junction 138 kV line to increase the emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1489	A sag study must be performed for the 5.40 mile Tristate – Chadwick 138 kV line to determine if a higher emergency rating can be used	AEP (100%)
b1490.1	Establish a new 138/69 kV Butler Center station	AEP (100%)
b1490.2	Build a new 14 mile 138 kV line from Auburn station to Woods Road station VIA Butler Center station	AEP (100%)
b1490.3	Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer	AEP (100%)
b1490.4	Improve the switching arrangement at Kendallville station	AEP (100%)
b1491	Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line	AEP (100%)
b1492	Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR	AEP (100%)
b1493	Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating	AEP (100%)
b1494	Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to increase its emergency rating	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1495	Add an additional 765/345 kV transformer at Baker Station	AEC (0.41%) / AEP (87.29%) / BGE (1.03%) / ComEd (3.39%) / Dayton (1.23%) / DL (1.46%) / DPL (0.54%) / JCPL (0.90%) / NEPTUNE (0.09%) / PECO (1.18%) / PEPCO (0.94%) / PSEG (1.48%) / RE (0.06%)
b1496	Replace 138 kV bus and risers at Johnson Mountain Station	AEP (100%)
b1497	Replace 138 kV bus and risers at Leesville Station	AEP (100%)
b1498	Replace 138 kV risers at Wurno Station	AEP (100%)
b1499	Perform a sag study on Sporn A – Gavin 138 kV to determine if the emergency rating can be improved	AEP (100%)
b1500	The North East Canton – Wagenhals 138 kV circuit would need an electrical clearance study to determine if the emergency rating can be utilized	AEP (100%)
b1501	The Moseley – Reusens 138 kV circuit requires a sag study to determine if the emergency rating can be utilized to address a thermal loading issue for a category C3	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1502	Reconductor the Conesville East – Conesville Prep Plant Tap 138 kV section of the Conesville – Ohio Central to fix Reliability N-1-1 thermal overloads		AEP (100%)
b1659	Establish Sorenson 345/138 kV station as a 765/345 kV station		AEP (93.67%) / ATSI (2.99%) / ComEd (2.07%) / PENELEC (0.31%) / PSEG (0.92%) / RE (0.04%)
b1659.1	Replace Sorenson 138 kV breaker 'L1'		AEP (100%)
b1659.2	Replace Sorenson 138 kV breaker 'L2' breaker		AEP (100%)
b1659.3	Replace Sorenson 138 kV breaker 'M1'		AEP (100%)
b1659.4	Replace Sorenson 138 kV breaker 'M2'		AEP (100%)
b1659.5	Replace Sorenson 138 kV breaker 'N1'		AEP (100%)
b1659.6	Replace Sorenson 138 kV breaker 'N2'		AEP (100%)
b1659.7	Replace Sorenson 138 kV breaker 'O1'		AEP (100%)
b1659.8	Replace Sorenson 138 kV breaker 'O2'		AEP (100%)
b1659.9	Replace Sorenson 138 kV breaker 'M'		AEP (100%)
b1659.10	Replace Sorenson 138 kV breaker 'N'		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1659.11	Replace Sorenson 138 kV breaker 'O'		AEP (100%)
b1659.12	Replace McKinley 138 kV breaker 'L1'		AEP (100%)
b1659.13	Establish 765 kV yard at Sorenson and install four 765 kV breakers		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> AEP (73.42%) / Dayton (11.78%) / DEOK (14.80%)
b1659.14	Build approximately 14 miles of 765 kV line from existing Dumont - Marysville line		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> AEP (63.21%) / ATSI (18.99%) / ComEd (3.32%) / Dayton (8.73%) / DL (5.41%) / EKPC (0.34%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1660	Install a 765/500 kV transformer at Cloverdale	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (98.28%) / DEOK (0.45%) / Dominion (1.11%) / EKPC (0.16%)
b1661	Install a 765 kV circuit breaker at Wyoming station	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1662	Rebuild 4 miles of 46 kV line to 138 kV from Pemberton to Cherry Creek		AEP (100%)
b1662.1	Circuit Breakers are installed at Cherry Creek (facing Pemberton) and at Pemberton (facing Tams Mtn. and Cherry Creek)		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1662.2	Install three 138 kV breakers at Grandview Station (facing Cherry Creek, Hinton, and Bradley Stations)	AEP (100%)
b1662.3	Remove Sullivan Switching Station (46 kV)	AEP (100%)
b1663	Install a new 765/138 kV transformer at Jackson Ferry substation	AEP (100%)
b1663.1	Establish a new 10 mile double circuit 138 kV line between Jackson Ferry and Wythe	AEP (100%)
b1663.2	Install 2 765 kV circuit breakers, breaker disconnect switches and associated bus work for the new 765 kV breakers, and new relays for the 765 kV breakers at Jackson's Ferry	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEP (100%)
b1664	Install switched capacitor banks at Kenwood 138 kV stations	AEP (100%)
b1665	Install a second 138/69 kV transformer at Thelma station	AEP (100%)
b1665.1	Construct a single circuit 69 kV line from West Paintsville to the new Paintsville station	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1665.2	Install new 7.2 MVAR, 46 kV bank at Kenwood Station	AEP (100%)
b1666	Build an 8 breaker 138 kV station tapping both circuits of the Fostoria - East Lima 138 kV line	AEP (90.65%) / Dayton (9.35%)
b1667	Establish Melmore as a switching station with both 138 kV circuits terminating at Melmore. Extend the double circuit 138 kV line from Melmore to Fremont Center	AEP (100%)
b1668	Revise the capacitor setting at Riverside 138 kV station	AEP (100%)
b1669	Capacitor setting changes at Ross 138 kV stations	AEP (100%)
b1670	Capacitor setting changes at Wooster 138 kV station	AEP (100%)
b1671	Install four 138 kV breakers in Danville area	AEP (100%)
b1676	Replace Natrium 138 kV breaker 'G (rehab)'	AEP (100%)
b1677	Replace Huntley 138 kV breaker '106'	AEP (100%)
b1678	Replace Kammer 138 kV breaker 'G'	AEP (100%)
b1679	Replace Kammer 138 kV breaker 'H'	AEP (100%)
b1680	Replace Kammer 138 kV breaker 'J'	AEP (100%)
b1681	Replace Kammer 138 kV breaker 'K'	AEP (100%)
b1682	Replace Kammer 138 kV breaker 'M'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1683	Replace Kammer 138 kV breaker 'N'	AEP (100%)
b1684	Replace Clinch River 138 kV breaker 'E1'	AEP (100%)
b1685	Replace Lincoln 138 kV breaker 'D'	AEP (100%)
b1687	Advance s0251.7 (Replace Corrid 138 kV breaker '104S')	AEP (100%)
b1688	Advance s0251.8 (Replace Corrid 138 kV breaker '104C')	AEP (100%)
b1712.1	Perform sag study on Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1712.2	Rebuild the Altavista - Leesville 138 kV line	Dominion (75.30%) / PEPCO (24.70%)
b1733	Perform a sag study of the Bluff Point - Jauy 138 kV line. Upgrade breaker, wavetrap, and risers at the terminal ends	AEP (100%)
b1734	Perform a sag study of Randolph - Hodgins 138 kV line. Upgrade terminal equipment	AEP (100%)
b1735	Perform a sag study of R03 - Magely 138 kV line. Upgrade terminal equipment	AEP (100%)
b1736	Perform a sag study of the Industrial Park - Summit 138 kV line	AEP (100%)
b1737	Sag study of Newcomerstown - Hillview 138 kV line. Upgrade - terminal equipment	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1738	Perform a sag study of the Wolf Creek - Layman 138 kV line. -Upgrade terminal equipment including a 138 kV breaker and wavetrap		AEP (100%)
b1739	Perform a sag study of the Ohio Central - West Trinway 138 kV line		AEP (100%)
b1741	Replace Beatty 138 kV breaker '2C(IPP)'		AEP (100%)
b1742	Replace Beatty 138 kV breaker '1E'		AEP (100%)
b1743	Replace Beatty 138 kV breaker '2E'		AEP (100%)
b1744	Replace Beatty 138 kV breaker '3C'		AEP (100%)
b1745	Replace Beatty 138 kV breaker '2W'		AEP (100%)
b1746	Replace St. Claire 138 kV breaker '8'		AEP (100%)
b1747	Replace Cloverdale 138 kV breaker 'C'		AEP (100%)
b1748	Replace Cloverdale 138 kV breaker 'D1'		AEP (100%)
b1780	Install two 138kV breakers and two 138kV circuit switchers at South Princeton Station and one 138kV breaker and one 138kV circuit switcher at Switchback Station		AEP (100%)
b1781	Install three 138 kV breakers and a 138kV circuit switcher at Trail Fork Station in Pineville, WV		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1782	Install a 46kV Moab at Montgomery Station facing Carbondale (on the London - Carbondale 46 kV circuit)	AEP (100%)
b1783	Add two 138 kV Circuit Breakers and two 138 kV circuit switchers on the Lonesome Pine - South Bluefield 138 kV line	AEP (100%)
b1784	Install a 52.8 MVAR capacitor bank at the Clifford 138 kV station	AEP (100%)
b1811.1	Perform a sag study of 4 miles of the Waterford - Muskingum line	AEP (100%)
b1811.2	Rebuild 0.1 miles of Waterford - Muskingum 345 kV with 1590 ACSR	AEP (100%)
b1812	Reconductor the AEP portion of the South Canton - Harmon 345 kV with 954 ACSR and upgrade terminal equipment at South Canton. Expected rating is 1800 MVA S/N and 1800 MVA S/E	AEP (100%)
b1817	Install (3) 345 kV circuit breakers at East Elkhart station in ring bus designed as a breaker and half scheme	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1818	Expand the Allen station by installing a second 345/138 kV transformer and adding four 138 kV exits by cutting in the Lincoln - Sterling and Milan - Timber Switch 138 kV double circuit tower line	AEP (88.30%) / ATSI (8.86%) / Dayton (2.84%)
b1819	Rebuild the Robinson Park - Sorenson 138 kV line corridor as a 345 kV double circuit line with one side operated at 345 kV and one side at 138 kV	AEP (87.18%) / ATSI (10.06%) / Dayton (2.76%)
b1859	Perform a sag study for Hancock - Cave Spring - Roanoke 138 kV circuit to reach new SE ratings of 272MVA (Cave Spring-Hancock), 205MVA (Cave Spring-Sunscape), 245MVA (ROANO2-Sunscape)	AEP (100%)
b1860	Perform a sag study on the Crooksville - Spencer Ridge section (14.3 miles) of the Crooksville-Poston-Strouds Run 138 kV circuit to see if any remedial action needed to reach the SE rating (175MVA)	AEP (100%)
b1861	Reconductor 0.83 miles of the Dale - West Canton 138 kV Tie-line and upgrade risers at West Canton 138 kV	AEP (100%)
b1862	Perform a sag study on the Grant - Greentown 138 kV circuit and replace the relay CT at Grant 138 kV station to see if any remedial action needed to reach the new ratings of 251/286MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1863	Perform a sag study of the Kammer - Wayman SW 138 kV line to see if any remedial action needed to reach the new SE rating of 284MVA	AEP (100%)
b1864.1	Add two additional 345/138 kV transformers at Kammer	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.2	Add second West Bellaire - Brues 138 kV circuit	AEP (87.22%) / APS (8.22%) / ATSI (3.52%) / DL (1.04%)
b1864.3	Replace Kammer 138 kV breaker 'E'	AEP (100%)
b1865	Perform a sag study on the Kanawha - Carbondale 138 kV line to see if any remedial action needed to reach the new ratings of 251/335MVA	AEP (100%)
b1866	Perform a sag study on the Clinch River-Lock Hart-Dorton 138kV line, increase the Relay Compliance Trip Limit at Clinch River on the C.R.-Dorton 138kV line to 310 and upgrade the risers with 1590ACSR	AEP (100%)
b1867	Perform a sag study on the Newcomerstown - South Coshocton 138 kV line to see if any remedial action is needed to reach the new SE rating of 179MVA	AEP (100%)
b1868	Perform sag study on the East Lima - new Liberty 138 kV line to see if any remedial action is needed to reach the new SE rating of 219MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1869	Perform a sag study of the Ohio Central - South Coshocton 138 kV circuit to see if any remedial action needed to reach the new SE ratings of 250MVA	AEP (100%)
b1870	Replace the Ohio Central transformer #1 345/138/12 kV 450 MVA for a 345/138/34.5 kV 675 MVA transformer	AEP (68.16%) / ATSI (25.27%) / Dayton (3.88%) / PENELEC (1.59%) / DEOK (1.10%)
b1871	Perform a sag study on the Central - West Coshocton 138 kV line (improving the emergency rating of this line to 254 MVA)	AEP (100%)
b1872	Add a 57.6 MVar capacitor bank at East Elkhart 138 kv station in Indiana	AEP (100%)
b1873	Install two 138 kV circuit breakers at Cedar Creek Station and primary side circuit switcher on the 138/69/46 kV transformer	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1874 Install two 138 kV circuit breakers and one 138 kV circuit switcher at Magely 138 kV station in Indiana		AEP (100%)
b1875 Build 25 miles of new 138 kV line from Bradley Station through Tower 117 Station and terminating at McClung 138 kV station. Existing 69 kV distribution transformers will be replaced with 138 kV transformers		AEP (100%)
b1876 Install a 14.4 MVar capacitor bank at Capital Avenue (AKA Currant Road) 34.5 kV bus		AEP (100%)
b1877 Relocate 138 kV Breaker G to the West Kingsport - Industry Drive 138 kV line and Remove 138 kV MOAB		AEP (100%)
b1878 Perform a sag study on the Lincoln - Robinson Park 138 kV line (Improve the emergency rating to 244 MVA)		AEP (100%)
b1879 Perform a sag study on the Hansonville - Meadowview 138 kV line (Improve the emergency rating to 245 MVA)		AEP (100%)
b1880 Rebuild the 15 miles of the Moseley - Roanoke 138 kV line. This project would consist of rebuilding both circuits on the double circuit line		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1881	Replace existing 600 Amp switches, station risers and increase the CT ratios associated with breaker 'G' at Sterling 138 kV Station. It will increase the rating to 296 MVA S/N and 384 MVA S/E	AEP (100%)
b1882	Perform a sag study on the Bluff Point - Randolph 138 kV line to see if any remedial action needed to reach the new SE rating of 255 MVA	AEP (100%)
b1883	Switch the breaker position of transformer #1 and SW Lima at East Lima 345 kV bus	AEP (100%)
b1884	Perform a sag study on Strawton station - Fisher Body - Deer Creek 138 kV line to see if any remedial action needed to reach the new SE rating of 250 MVA	AEP (100%)
b1887	Establish a new 138/69 kV source at Carrollton and construct two new 69 kV lines from Carrollton to tie into the Dennison - Miller SW 69 kV line and to East Dover 69 kV station respectively	AEP (100%)
b1888	Install a 69 kV line breaker at Blue Pennant 69 kV Station facing Bim Station and 14.4 MVar capacitor bank	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1889	Install a 43.2 MVAR capacitor bank at Hinton 138 kV station (APCO WV)	AEP (100%)
b1901	Rebuild the Ohio Central - West Trinway (4.84 miles) section of the Academia - Ohio Central 138 kV circuit. Upgrade the Ohio Central riser, Ohio Central switch and the West Trinway riser	AEP (100%)
b1904.1	Construct new 138/69 Michiana Station near Bridgman by tapping the new Carlisle - Main Street 138 kV and the Bridgman - Buchanan Hydro 69 kV line	AEP (100%)
b1904.2	Establish a new 138/12 kV New Galien station by tapping the Olive - Hickory Creek 138 kV line	AEP (100%)
b1904.3	Retire the existing Galien station and move its distribution load to New Galien station. Retire the Buchanan Hydro - New Carlisle 34.5 kV line	AEP (100%)
b1904.4	Implement an in and out scheme at Cook 69 kV by eliminating the Cook 69 kV tap point and by installing two new 69 kV circuit breakers	AEP (100%)
b1904.5	Rebuild the Bridgman - Cook 69 kV and the Derby - Cook 69 kV lines	AEP (100%)
b1946	Perform a sag study on the Brues - West Bellaire 138 kV line	AEP (100%)
b1947	A sag study of the Dequine - Meadowlake 345 kV line #1 line may improve the emergency rating to 1400 MVA	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1948 Establish a new 765/345 interconnection at Sporn. Install a 765/345 kV transformer at Mountaineer and build ¾ mile of 345 kV to Sporn		ATSI (61.08%) / DL (21.87%) / Dominion (13.97%) / PENELEC (3.08%)
b1949 Perform a sag study on the Grant Tap – Deer Creek 138 kV line and replace bus and risers at Deer Creek station		AEP (100%)
b1950 Perform a sag study on the Kammer – Ormet 138 kV line of the conductor section		AEP (100%)
b1951 Perform a sag study of the Maddox- Convoy 345 kV line to improve the emergency rating to 1400 MVA		AEP (100%)
b1952 Perform a sag study of the Maddox – T130 345 kV line to improve the emergency rating to 1400 MVA		AEP (100%)
b1953 Perform a sag study of the Meadowlake - Olive 345 kV line to improve the emergency rating to 1400 MVA		AEP (100%)
b1954 Perform a sag study on the Milan - Harper 138 kV line and replace bus and switches at Milan Switch station		AEP (100%)
b1955 Perform a sag study of the R-049 - Tillman 138 kV line may improve the emergency rating to 245 MVA		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1956 Perform a sag study of the Tillman - Dawkins 138 kV line may improve the emergency rating to 245 MVA		AEP (100%)
b1957 Terminate Transformer #2 at SW Lima in a new bay position		AEP (69.66%) / ATSI (23.19%) / PENELEC (2.43%) / PSEG (4.54%) / RE (0.18%)
b1958 Perform a sag study on the Brookside - Howard 138 kV line and replace bus and risers at AEP Howard station		AEP (100%)
b1960 Sag Study on 7.2 miles SE Canton-Canton Central 138kV ckt		AEP (100%)
b1961 Sag study on the Southeast Canton – Sunnyside 138kV line		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1962	Add four 765 kV breakers at Kammer	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> AEP (100%)
b1963	Build approximately 1 mile of circuit comprising of 2-954 ACSR to get the rating of Waterford-Muskinum 345 kV higher	AEP (100%)
b1970	Reconductor 13 miles of the Kammer – West Bellaire 345kV circuit	APS (33.58%) / ATSI (32.28%) / DL (18.68%) / Dominion (6.02%) / JCPL (1.68%) / Neptune* (0.18%) / PENELEC (4.59%) / PSEG (2.88%) / RE (0.11%)
b1971	Perform a sag study to improve the emergency rating on the Bridgville – Chandlersville 138 kV line	AEP (100%)
b1972	Replace disconnect switch on the South Canton 765/345 kV transformer	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1973	Perform a sag study to improve the emergency rating on the Carrollton – Sunnyside 138 kV line	AEP (100%)
b1974	Perform a sag study to improve the emergency rating on the Bethel Church – West Dover 138 kV line	AEP (100%)
b1975	Replace a switch at South Millersburg switch station	AEP (100%)
b2017	Reconductor or rebuild Sporn - Waterford - Muskingum River 345 kV line	ATSI (37.10%) / AEP (34.41%) / DL (10.43%) / Dominion (6.20%) / APS (3.95%) / PENELEC (3.10%) / JCPL (1.39%) / Dayton (1.20%) / Neptune* (0.14%) / PSEG (2.00%) / RE (0.08%)
b2018	Loop Conesville - Bixby 345 kV circuit into Ohio Central	ATSI (58.58%) / AEP (14.16%) / APS (12.88%) / DL (7.93%) / PENELEC (5.73%) / Dayton (0.72%)
b2019	Establish Burger 345/138 kV station	AEP (93.74%) / APS (4.40%) / DL (1.11%) / ATSI (0.74%) / PENELEC (0.01%)
b2020	Rebuild Amos - Kanawah River 138 kV corridor	AEP (88.39%) / APS (7.12%) / ATSI (2.89%) / DEOK (1.58%) / PEPCO (0.02%)
b2021	Add 345/138 transformer at Sporn, Kanawah River & Muskingum River stations	AEP (91.92%) / DEOK (3.60%) / APS (2.19%) / ATSI (1.14%) / DL (1.08%) / PEPCO (0.04%) / BGE (0.03%)
b2021.1	Replace Kanawah 138 kV breaker 'L'	AEP (100%)
b2021.2	Replace Muskingum 138 kV breaker 'HG'	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2021.3	Replace Muskingum 138 kV breaker 'HJ'	AEP (100%)
b2021.4	Replace Muskingum 138 kV breaker 'HE'	AEP (100%)
b2021.5	Replace Muskingum 138 kV breaker 'HD'	AEP (100%)
b2021.6	Replace Muskingum 138 kV breaker 'HF'	AEP (100%)
b2021.7	Replace Muskingum 138 kV breaker 'HC'	AEP (100%)
b2021.8	Replace Sporn 138 kV breaker 'D1'	AEP (100%)
b2021.9	Replace Sporn 138 kV breaker 'D2'	AEP (100%)
b2021.10	Replace Sporn 138 kV breaker 'F1'	AEP (100%)
b2021.11	Replace Sporn 138 kV breaker 'F2'	AEP (100%)
b2021.12	Replace Sporn 138 kV breaker 'G'	AEP (100%)
b2021.13	Replace Sporn 138 kV breaker 'G2'	AEP (100%)
b2021.14	Replace Sporn 138 kV breaker 'N1'	AEP (100%)
b2021.15	Replace Kanawah 138 kV breaker 'M'	AEP (100%)
b2022	Terminate Tristate - Kyger Creek 345 kV line at Sporn	AEP (97.99%) / DEOK (2.01%)
b2027	Perform a sag study of the Tidd - Collier 345 kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2028	Perform a sag study on East Lima - North Woodcock 138 kV line to improve the rating	AEP (100%)
b2029	Perform a sag study on Bluebell - Canton Central 138 kV line to improve the rating	AEP (100%)
b2030	Install 345 kV circuit breakers at West Bellaire	AEP (100%)
b2031	Sag study on Tilton - W. Bellaire section 1 (795 ACSR), about 12 miles	AEP (100%)
b2032	Rebuild 138 kV Elliot tap - Poston line	ATSI (73.02%) / Dayton (19.39%) / DL (7.59%)
b2033	Perform a sag study of the Brues - W. Bellaire 138 kV line	AEP (100%)
b2046	Adjust tap settings for Muskingum River transformers	AEP (100%)
b2047	Replace relay at Greenlawn	AEP (100%)
b2048	Replace both 345/138 kV transformers with one bigger transformer	AEP (92.49%) / Dayton (7.51%)
b2049	Replace relay	AEP (100%)
b2050	Perform sag study	AEP (100%)
b2051	Install 3 138 kV breakers and a circuit switcher at Dorton station	AEP (100%)
b2052	Replace transformer	AEP (67.17%) / ATSI (27.37%) / Dayton (3.73%) / PENELEC (1.73%)
b2054	Perform a sag study of Sporn - Rutland 138 kV line	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2069 Replace George Washington 138 kV breaker 'A' with 63kA rated breaker		AEP (100%)
b2070 Replace Harrison 138 kV breaker '6C' with 63kA rated breaker		AEP (100%)
b2071 Replace Lincoln 138 kV breaker 'L' with 63kA rated breaker		AEP (100%)
b2072 Replace Natrum 138 kV breaker 'T' with 63kA rated breaker		AEP (100%)
b2073 Replace Darrah 138 kV breaker 'B' with 63kA rated breaker		AEP (100%)
b2074 Replace Wyoming 138 kV breaker 'G' with 80kA rated breaker		AEP (100%)
b2075 Replace Wyoming 138 kV breaker 'G1' with 80kA rated breaker		AEP (100%)
b2076 Replace Wyoming 138 kV breaker 'G2' with 80kA rated breaker		AEP (100%)
b2077 Replace Wyoming 138 kV breaker 'H' with 80kA rated breaker		AEP (100%)
b2078 Replace Wyoming 138 kV breaker 'H1' with 80kA rated breaker		AEP (100%)
b2079 Replace Wyoming 138 kV breaker 'H2' with 80kA rated breaker		AEP (100%)
b2080 Replace Wyoming 138 kV breaker 'J' with 80kA rated breaker		AEP (100%)

\*Neptune Regional Transmission System, LLC

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2081	Replace Wyoming 138 kV breaker 'J1' with 80kA rated breaker		AEP (100%)
b2082	Replace Wyoming 138 kV breaker 'J2' with 80kA rated breaker		AEP (100%)
b2083	Replace Natrum 138 kV breaker 'K' with 63kA rated breaker		AEP (100%)
b2084	Replace Tanner Creek 345 kV breaker 'P' with 63kA rated breaker		AEP (100%)
b2085	Replace Tanner Creek 345 kV breaker 'P2' with 63kA rated breaker		AEP (100%)
b2086	Replace Tanner Creek 345 kV breaker 'Q1' with 63kA rated breaker		AEP (100%)
b2087	Replace South Bend 138 kV breaker 'T' with 63kA rated breaker		AEP (100%)
b2088	Replace Tidd 138 kV breaker 'L' with 63kA rated breaker		AEP (100%)
b2089	Replace Tidd 138 kV breaker 'M2' with 63kA rated breaker		AEP (100%)
b2090	Replace McKinley 138 kV breaker 'A' with 40kA rated breaker		AEP (100%)
b2091	Replace West Lima 138 kV breaker 'M' with 63kA rated breaker		AEP (100%)
b2092	Replace George Washington 138 kV breaker 'B' with 63kA rated breaker		AEP (100%)

\*Neptune Regional Transmission System, LLC

**AEP Service Corporation on behalf of its Affiliate Companies (AEP Indiana Michigan Transmission Company, AEP Kentucky Transmission Company, AEP Ohio Transmission Company, AEP West Virginia Transmission Company, Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company and Wheeling Power Company) (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2093	Replace Turner 138 kV breaker 'W' with 63kA rated breaker	AEP (100%)
b2135	Build a new 138 kV line from Falling Branch to Merrimac and add a 138/69 kV transformer at Merrimac Station	AEP (100%)
b2160	Add a fourth circuit breaker to the station being built for the U4-038 project (Conelley), rebuild U4-038 - Grant Tap line as double circuit tower line	AEP (100%)
b2161	Rebuild approximately 20 miles of the Allen - S073 double circuit 138 kV line (with one circuit from Allen - Tillman - Timber Switch - S073 and the other circuit from Allen - T-131 - S073) utilizing 1033 ACSR	AEP (100%)
b2162	Perform a sag study to improve the emergency rating of the Belpre - Degussa 138 kV line	AEP (100%)
b2163	Replace breaker and wavetrap at Jay 138 kV station	AEP (100%)

\*Neptune Regional Transmission System, LLC

## SCHEDULE 12 – APPENDIX

### (20) Virginia Electric and Power Company

Required Transmission Enhancements		Annual Revenue Requirement***	Responsible Customer(s)
b0217	Upgrade Mt. Storm - Doubs 500kV		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> APS (25.20%) / BGE (10.49%) / Dominion (52.48%) / PEPCO (11.83%)
b0222	Install 150 MVAR capacitor at Loudoun 500 kV		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

\*\*\* The Annual Revenue Requirement for all Virginia Electric and Power Company projects in this Section 20 shall be as specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B.



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0223	Install 150 MVAR capacitor at Asburn 230 kV		Dominion (100%)
b0224	Install 150 MVAR capacitor at Dranesville 230 kV		Dominion (100%)
b0225	Install 33 MVAR capacitor at Possum Pt. 115 kV		Dominion (100%)
b0226	Install 500/230 kV transformer at Clifton and Clifton 500 kV 150 MVAR capacitor	As specified in Attachment 7 to Appendix A of Attachment H-16A and under the procedures detailed in Attachment H-16B	APS (3.69%) / BGE (3.54%) / Dominion (85.73%) / PEPCO (7.04%)
b0227	Install 500/230 kV transformer at Bristers; build new 230 kV Bristers-Gainsville circuit, upgrade two Loudoun-Brambleton circuits		AEC (0.71%) / APS (3.36%) / BGE (10.93%) / DPL (1.66%) / Dominion (67.38%) / ME (0.89%) / PECO (2.33%) / PEPCO (12.20%) / PPL (0.54%)
b0227.1	Loudoun Sub – upgrade 6-230 kV breakers		Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0231	Install 500 kV breakers & 500 kV bus work at Suffolk		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPSCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> Dominion (100%)
b0231.2	Install 500/230 kV Transformer, 230 kV breakers, & 230 kV bus work at Suffolk		Dominion (100%)
b0232	Install 150 MVAR capacitor at Lynnhaven 230 kV		Dominion (100%)
b0233	Install 150 MVAR capacitor at Landstown 230 kV		Dominion (100%)
b0234	Install 150 MVAR capacitor at Greenwich 230 kV		Dominion (100%)
b0235	Install 150 MVAR capacitor at Fentress 230 kV		Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0307	Reconductor Endless Caverns – Mt. Jackson 115 kV		Dominion (100%)
b0308	Replace L breaker and switches at Endless Caverns 115 kV		Dominion (100%)
b0309	Install SPS at Earleys 115 kV		Dominion (100%)
b0310	Reconductor Club House – South Hill and Chase City – South Hill 115 kV		Dominion (100%)
b0311	Reconductor Idylwood to Arlington 230 kV		Dominion (100%)
b0312	Reconductor Gallows to Ox 230 kV		Dominion (100%)
b0325	Install a 2 <sup>nd</sup> Everetts 230/115 kV transformer		Dominion (100%)
b0326	Uprate/resag Remington-Brandywine-Culppr 115 kV		Dominion (100%)
b0327	Build 2 <sup>nd</sup> Harrisonburg – Valley 230 kV		APS (19.79%) / Dominion (76.18%) / PEPSCO (4.03%)
b0328.1	Build new Meadow Brook – Loudoun 500 kV circuit (30 of 50 miles)		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPSCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.3	Upgrade Mt. Storm 500 kV substation	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> APS (33.78%) / Dominion (57.67%) / PEPCO (8.55%)
b0328.4	Upgrade Loudoun 500 kV substation	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> Dominion (100%)
b0329	Build Carson – Suffolk 500 kV, install 2 <sup>nd</sup> Suffolk 500/230 kV transformer & build Suffolk – Fentress 230 kV circuit	Dominion (100%)††
b0329.1	Replace Thole Street 115 kV breaker ‘48T196’	Dominion (100%)
b0329.2	Replace Chesapeake 115 kV breaker ‘T242’	Dominion (100%)
b0329.3	Replace Chesapeake 115 kV breaker ‘8722’	Dominion (100%)
b0329.4	Replace Chesapeake 115 kV breaker ‘16422’	Dominion (100%)
b0330	Install Crewe 115 kV breaker and shift load from line 158 to 98	Dominion (100%)
b0331	Upgrade/resag Shell Bank – Whealton 115 kV (Line 165)	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

†Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

††Cost allocations associated with below 500 kV elements of the project

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0332	Uprate/resag Chesapeake – Cradock 115 kV	Dominion (100%)
b0333	Replace wave trap on Elmont – Replace (Line #231)	Dominion (100%)
b0334	Uprate/resag Iron Bridge-Walmsley-Southwest 230 kV	Dominion (100%)
b0335	Build Chase City – Clarksville 115 kV	Dominion (100%)
b0336	Reconductor one span of Chesapeake – Dozier 115 kV close to Dozier substation	Dominion (100%)
b0337	Build Lexington 230 kV ring bus	Dominion (100%)
b0338	Replace Gordonsville 230/115 kV transformer for larger one	Dominion (100%)
b0339	Install Breaker at Doods 230 kV Sub	Dominion (100%)
b0340	Reconductor one span Peninsula – Magruder 115 kV close to Magruder substation	Dominion (100%)
b0341	Install a breaker at Northern Neck 115 kV	Dominion (100%)
b0342	Replace Trowbridge 230/115 kV transformer	Dominion (100%)
b0403	2 <sup>nd</sup> Doods 500/230 kV transformer addition	APS (3.35%) / BGE (4.22%) / DPL (1.10%) / Dominion (83.94%) / PEPCO (7.39%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0412	Retension Pruntytown – Mt. Storm 500 kV to a 3502 MVA rating	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> APS (51.45%) / DEOK (17.51%) / PEPCO (31.04%)
b0450	Install 150 MVAR Capacitor at Fredricksburg 230 kV	Dominion (100%)
b0451	Install 25 MVAR Capacitor at Somerset 115 kV	Dominion (100%)
b0452	Install 150 MVAR Capacitor at Northwest 230 kV	Dominion (100%)
b0453.1	Convert Remington – Sowego 115 kV to 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.2	Add Sowego – Gainesville 230 kV	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0453.3	Add Sowego 230/115 kV transformer	APS (0.31%) / BGE (3.01%) / DPL (0.04%) / Dominion (92.75%) / ME (0.03%) / PEPCO (3.86%)
b0454	Reconductor 2.4 miles of Newport News – Chuckatuck 230 kV	Dominion (100%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0455	Add 2 <sup>nd</sup> Endless Caverns 230/115 kV transformer	APS (32.70%) / BGE (7.01%) / DPL (1.80%) / Dominion (50.82%) / PEPCO (7.67%)
b0456	Reconductor 9.4 miles of Edinburg – Mt. Jackson 115 kV	APS (33.69%) / BGE (12.18%) / Dominion (40.08%) / PEPCO (14.05%)
b0457	Replace both wave traps on Dooks – Lexington 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> Dominion (100%)
b0467.2	Reconductor the Dickerson – Pleasant View 230 kV circuit	AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.54%) / PEPCO (41.86%) / PPL (2.07%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.



## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.6	Replace Mount Storm 500 kV breaker 55072	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)
b0492.7	Replace Mount Storm 500 kV breaker 55172	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.8	Replace Mount Storm 500 kV breaker H1172-2	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</p>
b0492.9	Replace Mount Storm 500 kV breaker G2T550	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</p>

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

# Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.10	Replace Storm breaker G2T554	Mount 500 kV
b0492.11	Replace Storm breaker G1T551	Mount 500 kV

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.12	Upgrade nameplate rating of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)</p>
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.5	Advance n0716 (Ox - Replace 230kV breaker L242)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

\* Neptune Regional Transmission System, LLC

\*\* East Coast Power, L.L.C.

\*\*\* Hudson Transmission Partners, LLC

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.6	Advance n0717 (Possum Point - Replace 230kV breaker SC192)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0583	Install dual primary protection schemes on Gosport lines 62 and 51 at the remote terminals (Chesapeake on the 62 line and Reeves Ave on the 51 line)	Dominion (100%)
b0756	Install a second 500/115 kV autotransformer at Chancellor 500 kV	Dominion (100%)
b0756.1	Install two 500 kV breakers at Chancellor 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0757	Reconductor one mile of Chesapeake – Reeves Avenue 115 kV line	Dominion (100%)
b0758	Install a second Fredericksburg 230/115 kV autotransformer	Dominion (100%)
b0760	Build 115 kV line from Kitty Hawk to Colington 115 kV (Colington on the existing line and Nag's Head and Light House DP on new line)	Dominion (100%)
b0761	Install a second 230/115 kV transformer at Possum Point	Dominion (100%)
b0762	Build a new Elko station and transfer load from Turner and Providence Forge stations	Dominion (100%)
b0763	Rebuild 17.5 miles of the line for a new summer rating of 262 MVA	Dominion (100%)
b0764	Increase the rating on 2.56 miles of the line between Greenwich and Thompson Corner; new rating to be 257 MVA	Dominion (100%)
b0765	Add a second Bull Run 230/115 kV autotransformer	Dominion (100%)
b0766	Increase the rating of the line between Loudoun and Cedar Grove to at least 150 MVA	Dominion (100%)
b0767	Extend the line from Old Church – Chickahominy 230 kV	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0768	Loop line #251 Idylwood – Arlington into the GIS sub	Dominion (100%)
b0769	Re-tension 15 miles of the line for a new summer rating of 216 MVA	Dominion (100%)
b0770	Add a second 230/115 kV autotransformer at Lanexa	Dominion (100%)
b0770.1	Replace Lanexa 115 kV breaker '8532'	Dominion (100%)
b0770.2	Replace Lanexa 115 kV breaker '9232'	Dominion (100%)
b0771	Build a parallel Chickahominy – Lanexa 230 kV line	Dominion (100%)
b0772	Install a second Elmont 230/115 kV autotransformer	Dominion (100%)
b0772.1	Replace Elmont 115 kV breaker '7392'	Dominion (100%)
b0774	Install a 33 MVAR capacitor at Bremo 115 kV	Dominion (100%)
b0775	Reconductor the Greenwich – Virginia Beach line to bring it up to a summer rating of 261 MVA; Reconductor the Greenwich – Amphibious Base line to bring it up to 291 MVA	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0776	Re-build Trowbridge – Winfall 115 kV	Dominion (100%)
b0777	Terminate the Thelma – Carolina 230 kV circuit into Lakeview 230 kV	Dominion (100%)
b0778	Install 29.7 MVAR capacitor at Lebanon 115 kV	Dominion (100%)
b0779	Build a new 230 kV line from Yorktown to Hayes but operate at 115 kV initially	Dominion (100%)
b0780	Reconductor Chesapeake – Yadkin 115 kV line	Dominion (100%)
b0781	Reconductor and replace terminal equipment on line 17 and replace the wave trap on line 88	Dominion (100%)
b0782	Install a new 115 kV capacitor at Dupont Waynesboro substation	Dominion (100%)
b0784	Replace wave traps on North Anna to Ladysmith 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPSCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> Dominion (100%)
b0785	Rebuild the Chase City – Crewe 115 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0786	Reconductor the Moran DP – Crewe 115 kV segment	Dominion (100%)
b0787	Upgrade the Chase City – Twitty’s Creek 115 kV segment	Dominion (100%)
b0788	Reconductor the line from Farmville – Pamplin 115 kV	Dominion (100%)
b0793	Close switch 145T183 to network the lines. Rebuild the section of the line #145 between Possum Point – Minnieville DP 115 kV	Dominion (100%)
b0815	Replace Elmont 230 kV breaker '22192'	Dominion (100%)
b0816	Replace Elmont 230 kV breaker '21692'	Dominion (100%)
b0817	Replace Elmont 230 kV breaker '200992'	Dominion (100%)
b0818	Replace Elmont 230 kV breaker '2009T2032'	Dominion (100%)
b0837	At Mt. Storm, replace the existing MOD on the 500 kV side of the transformer with a circuit breaker	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0888	Replace Loudoun 230 kV Cap breaker 'SC352'		Dominion (100%)
b0892	Replace Chesapeake 115 kV breaker SX522		Dominion (100%)
b0893	Replace Chesapeake 115 kV breaker T202		Dominion (100%)
b0894	Replace Possum Point 115 kV breaker SX-32		Dominion (100%)
b0895	Replace Possum Point 115 kV breaker L92-1		Dominion (100%)
b0896	Replace Possum Point 115 kV breaker L92-2		Dominion (100%)
b0897	Replace Suffolk 115 kV breaker T202		Dominion (100%)
b0898	Replace Peninsula 115 kV breaker SC202		Dominion (100%)
b0921	Reconductor Brambleton - Cochran Mill 230 kV line with 201 Yukon conductor		Dominion (100%)
b0923	Install 50-100 MVAR variable reactor banks at Carson 230 kV		Dominion (100%)
b0924	Install 50-100 MVAR variable reactor banks at Dooms 230 kV		Dominion (100%)
b0925	Install 50-100 MVAR variable reactor banks at Garrisonville 230 kV		Dominion (100%)
b0926	Install 50-100 MVAR variable reactor banks at Hamilton 230 kV		Dominion (100%)
b0927	Install 50-100 MVAR variable reactor banks at Yadkin 230 kV		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0928	Install 50-100 MVAR variable reactor banks at Carolina, Doods, Everetts, Idylwood, N. Alexandria, N. Anna, Suffolk and Valley 230 kV substations	Dominion (100%)
b1056	Build a 2nd Shawboro – Elizabeth City 230kV line	Dominion (100%)
b1058	Add a third 230/115 kV transformer at Suffolk substation	Dominion (100%)
b1058.1	Replace Suffolk 115 kV breaker 'T122' with a 40 kA breaker	Dominion (100%)
b1058.2	Convert Suffolk 115 kV straight bus to a ring bus for the three 230/115 kV transformers and three 115 kV lines	Dominion (100%)
b1071	Rebuild the existing 115 kV corridor between Landstown - Va Beach Substation for a double circuit arrangement (230 kV & 115 kV)	Dominion (100%)
b1076	Replace existing North Anna 500-230kV transformer with larger unit	Dominion (100%)
b1087	Replace Cannon Branch 230-115 kV with larger transformer	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1088	Build new Radnor Heights Sub, add new underground circuit from Ballston - Radnor Heights, Tap the Glebe - Davis line and create circuits from Davis - Radnor Heights and Glebe - Radnor Heights		Dominion (100%)
b1089	Install 2nd Burke to Sideburn 230 kV underground cable		Dominion (100%)
b1090	Install a 150 MVAR 230 kV capacitor and one 230 kV breaker at Northwest		Dominion (100%)
b1095	Reconductor Chase City 115 kV bus and add a new tie breaker		Dominion (100%)
b1096	Construct 10 mile double ckt. 230kV tower line from Loudoun to Middleburg		Dominion (100%)
b1102	Replace Bremo 115 kV breaker '9122'		Dominion (100%)
b1103	Replace Bremo 115 kV breaker '822'		Dominion (100%)
b1172	Build a 4-6 mile long 230 kV line from Hopewell to Bull Hill (Ft Lee) and install a 230-115 kV Tx		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1188	Build new Brambleton 500 kV three breaker ring bus connected to the Loudoun to Pleasant View 500 kV line	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> Dominion (100%)
b1188.1	Replace Loudoun 230 kV breaker '200852' with a 63 kA breaker	Dominion (100%)
b1188.2	Replace Loudoun 230 kV breaker '2008T2094' with a 63 kA breaker	Dominion (100%)
b1188.3	Replace Loudoun 230 kV breaker '204552' with a 63 kA breaker	Dominion (100%)
b1188.4	Replace Loudoun 230 kV breaker '209452' with a 63 kA breaker	Dominion (100%)
b1188.5	Replace Loudoun 230 kV breaker 'WT2045' with a 63 kA breaker	Dominion (100%)
b1188.6	Install one 500/230 kV transformer and two 230 kV breakers at Brambleton	AEC (0.22%) / BGE (7.90%) / DPL (0.59%) / Dominion (75.58%) / ME (0.22%) / PECO (0.73%) / PEPCO (14.76%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1224	Install 2nd Clover 500/230 kV transformer and a 150 MVar capacitor	BGE (7.56%) / DPL (1.03%) / Dominion (78.21%) / ME (0.77%) / PECO (1.39%) / PEPCO (11.04%)
b1225	Replace Yorktown 115 kV breaker 'L982-1'	Dominion (100%)
b1226	Replace Yorktown 115 kV breaker 'L982-2'	Dominion (100%)
b1279	Line #69 Uprate – Increase rating on Locks – Purdy 115 kV to serve additional load at the Reams delivery point	Dominion (100%)
b1306	Reconfigure 115 kV bus at Endless Caverns substation such that the existing two 230/115 kV transformers at Endless Caverns operate in	Dominion (100%)
b1307	Install a 2nd 230/115 kV transformer at Northern Neck Substation	Dominion (100%)
b1308	Improve LSE's power factor in zone to .973 PF, adjust LTC's at Gordonsville and Remington, move existing shunt capacitor banks	Dominion (100%)
b1309	Install a 230 kV line from Lakeside to Northwest utilizing the idle line and 60 line ROW's and reconductor the existing 221 line between Elmont and Northwest	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1310 Install a 115 kV breaker at Broadnax substation on the South Hill side of Broadnax		Dominion (100%)
b1311 Install a 230 kV 3000 amp breaker at Cranes Corner substation to sectionalize the 2104 line into two lines		Dominion (100%)
b1312 Loop the 2054 line in and out of Hollymeade and place a 230 kV breaker at Hollymeade. This creates two lines: Charlottesville - Hollymeade		Dominion (100%)
b1313 Resag wire to 125C from Chesterfield – Shockoe and replace line switch 1799 with 1200 amp switch. The new rating would be 231 MVA.		Dominion (100%)
b1314 Rebuild the 6.8 mile line #100 from Chesterfield to Harrowgate 115 kV for a minimum 300 MBA rating		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1315	Convert line #64 Trowbridge to Winfall to 230 kV and install a 230 kV capacitor bank at Winfall		Dominion (100%)
b1316	Rebuild 10.7 miles of 115 kV line #80, Battleboro – Heartsease DP		Dominion (100%)
b1317	LSE load power factor on the #47 line will need to meet MOA requirements of .973 in 2015 to further resolve this issue through at least 2019		Dominion (100%)
b1318	Install a 115 kV bus tie breaker at Acca substation between the Line #60 and Line #95 breakers		Dominion (100%)
b1319	Resag line #222 to 150 C and upgrade any associated equipment to a 2000A rating to achieve a 706 MVA summer line rating		Dominion (100%)
b1320	Install a 230 kV, 150 MVAR capacitor bank at Southwest substation		Dominion (100%)
b1321	Build a new 230 kV line North Anna – Oak Green and install a 224 MVA 230/115 kV transformer at Oak Green		BGE (0.85%) / Dominion (97.96%) / PEPCO (1.19%)
b1322	Rebuild the 39 Line (Dooms – Sherwood) and the 91 Line (Sherwood – Bremono)		Dominion (100%)
b1323	Install a 224 MVA 230/115 kV transformer at Staunton. Rebuild the 115 kV line #43 section Staunton - Verona		Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1324	Install a 115 kV capacitor bank at Oak Ridge. Install a capacitor bank at New Bohemia. Upgrade 230/34.5 kV transformer #3 at Kings Fork	Dominion (100%)
b1325	Rebuild 15 miles of line #2020 Winfall – Elizabeth City with a minimum 900 MVA rating	Dominion (100%)
b1326	Install a third 168 MVA 230/115 kV transformer at Kitty Hawk with a normally open 230 kV breaker and a low side 115 kV breaker	Dominion (100%)
b1327	Rebuild the 20 mile section of line #22 between Kerr Dam – Eatons Ferry substations	Dominion (100%)
b1328	Uprate the 3.63 mile line section between Possum and Dumfries substations, replace the 1600 amp wave trap at Possum Point	AEC (0.66%) / APS (3.59%) / DPL (0.91%) / Dominion (92.94%) / PECO (1.90%)
b1329	Install line-tie breakers at Sterling Park substation and BECO substation	Dominion (100%)
b1330	Install a five breaker ring bus at the expanded Dulles substation to accommodate the existing Dulles Arrangement and support the Metrorail	Dominion (100%)
b1331	Build a 230 kV line from Shawboro to Aydlett tap and connect Aydlett to the new line	Dominion (100%)
b1332	Build Cannon Branch to Nokesville 230 kV line	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1333	Advance n1728 (Replace Possum Point 230 kV breaker H9T237 with an 80 kA breaker)		Dominion (100%)
b1334	Advance n1748 (Replace Ox 230 kV breaker 22042 with a 63 kA breaker)		Dominion (100%)
b1335	Advance n1749 (Replace Ox 230 kV breaker 220T2603 with a 63 kA breaker)		Dominion (100%)
b1336	Advance n1750 (Replace Ox 230 kV breaker 24842 with a 63 kA breaker)		Dominion (100%)
b1337	Advance n1751 (Replace Ox 230 kV breaker 248T2013 with a 63 kA breaker)		Dominion (100%)
b1503.1	Loop Line #2095 in and out of Waxpool approximately 1.5 miles		Dominion (100%)
b1503.2	Construct a new 230kV line from Brambleton to BECO Substation of approximately 11 miles with approximately 10 miles utilizing the vacant side of existing Line #2095 structures		Dominion (100%)
b1503.3	Install a one 230 kV breaker, Future 230 kV ring-bus at Waxpool Substation		Dominion (100%)
b1503.4	The new Brambleton - BECO line will feed Shellhorn Substation load and Greenway TX's #2&3 load		Dominion (100%)

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**Virginia Electric and Power Company (cont.)**

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1506.1	At Gainesville Substation, create two 115 kV straight-buses with a normally open tie-breaker	Dominion (100%)
b1506.2	Upgrade Line 124 (radial from Loudoun) to a minimum continuous rating of 500 MVA and network it into the 115 kV bus feeding NOVEC's DP at Gainesville	Dominion (100%)
b1506.3	Install two additional 230 kV breakers in the ring at Gainesville (may require substation expansion) to accommodate conversion of NOVEC's Gainesville to Wheeler line	Dominion (100%)
b1506.4	Convert NOVEC's Gainesville-Wheeler line from 115 kV to 230 kV (will require Gainesville DP Upgrade replacement of three transformers total at Atlantic and Wheeler Substations)	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1507	Rebuild Mt Storm – Doubs 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (25.20%) / BGE (10.49%) / Dominion (52.48%) / PEPCO (11.83%)</p>
b1508.1	Build a 2nd 230 kV Line Harrisonburg to Endless Caverns	APS (37.05%) / Dominion (62.95%)
b1508.2	Install a 3rd 230-115 kV Tx at Endless Caverns	APS (37.05%) / Dominion (62.95%)
b1508.3	Upgrade a 115 kV shunt capacitor banks at Merck and Edinburg	APS (37.05%) / Dominion (62.95%)
b1536	Advance n1752 (Replace OX 230 breaker 24342 with an (63kA breaker)	Dominion (100%)
b1537	Advance n1753 (Replace OX 230 breaker 243T2097 with an 63kA breaker)	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1538	Replace Loudoun 230 kV breaker '29552'		Dominion (100%)
b1571	Replace Acca 115 kV breaker '6072' with 40 kA		Dominion (100%)
b1647	Upgrade the name plate rating at Morrisville 500kV breaker 'H1T573' with 50kA breaker		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> Dominion (100%)
b1648	Upgrade name plate rating at Morrisville 500kV breaker 'H2T545' with 50kA breaker		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1649	Replace Morrisville 500kV breaker 'H1T580' with 50kA breaker	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1650	Replace Morrisville 500kV breaker 'H2T569' with 50kA breaker	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1651	Replace Loudoun 230kV breaker '295T2030' with 63kA breaker	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1652	Replace Ox 230kV breaker '209742' with 63kA breaker	Dominion (100%)
b1653	Replace Clifton 230kV breaker '26582' with 63kA breaker	Dominion (100%)
b1654	Replace Clifton 230kV breaker '26682' with 63kA breaker	Dominion (100%)
b1655	Replace Clifton 230kV breaker '205182' with 63kA breaker	Dominion (100%)
b1656	Replace Clifton 230kV breaker '265T266' with 63kA breaker	Dominion (100%)
b1657	Replace Clifton 230kV breaker '2051T2063' with 63kA breaker	Dominion (100%)
b1694	Rebuild Loudoun - Brambleton 500 kV Rebuild Loudoun - Brambleton 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> Dominion (84.25%) / PEPCO (15.75%)
b1696	Install a breaker and a half scheme with a minimum of eight 230 kV breakers for five existing lines at Idylwood 230 kV	AEC (0.46%) / APS (4.18%) / BGE (2.02%) / DPL (0.80%) / Dominion (88.45%) / JCPL (0.64%) / ME (0.50%) / NEPTUNE* (0.06%) / PECO (1.55%) / PEPCO (1.34%)

## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1697	Build a 2nd Clark - Idylwood 230 kV line and install 230 kV gas-hybrid breakers at Clark	AEC (1.35%) / APS (15.65%) / BGE (10.53%) / DPL (2.59%) / Dominion (46.97%) / JCPL (2.36%) / ME (1.91%) / NEPTUNE* (0.23%) / PECO (4.48%) / PEPCO (11.23%) / PSEG (2.59%) / RE (0.11%)
b1698	Install a 2nd 500/230 kV transformer at Brambleton	APS (4.21%) / BGE (13.28%) / DPL (1.09%) / Dominion (59.38%) / PEPCO (22.04%)
b1698.1	Install a 500 kV breaker at Brambleton	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1698.6	Replace Brambleton 230 kV breaker '2094T2095'	Dominion (100%)
b1699	Reconfigure Line #203 to feed Edwards Ferry sub radial from Pleasant View 230 kV and install new breaker bay at Pleasant View Sub	Dominion (100%)
b1700	Install a 230/115 kV transformer at the new Liberty substation to relieve Gainesville Transformer #3	Dominion (100%)
b1701	Reconductor line #2104 (Fredericksburg - Cranes Corner 230 kV)	APS (8.66%) / BGE (10.95%) / Dominion (63.30%) / PEPCO (17.09%)
b1724	Install a 2nd 138/115 kV transformer at Edinburg	Dominion (100%)
b1728	Replace the 115/34.5 kV transformer #1 at Hickory with a 230/34.5 kV transformer	Dominion (100%)
b1729	Add 4 breaker ring bus at Burton 115 kV substation and construct a 115 kV line approximately 3.5 miles from Oakwood 115 kV substation to Burton 115 kV substation	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1730	Install a 230/115 kV transformer at a new Liberty substation	Dominion (100%)
b1731	Uprate or rebuild Four Rivers – Kings Dominion 115 kV line or Install capacitors or convert load from 115 kV system to 230 kV system	Dominion (100%)
b1790	Split Wharton 115 kV capacitor bank into two smaller units and add additional reactive support in area by correcting power factor at Pantego 115 kV DP and FivePoints 115 kV DP to minimum of 0.973	Dominion (100%)
b1791	Wreck and rebuild 2.1 mile section of Line #11 section between Gordonsville and Somerset	APS (5.83%) / BGE (6.25%) / Dominion (78.38%) / PEPCO (9.54%)
b1792	Rebuild line #33 Halifax to Chase City, 26 miles. Install 230 kV 4 breaker ring bus	Dominion (100%)
b1793	Wreck and rebuild remaining section of Line #22, 19.5 miles and replace two pole H frame construction built in 1930	Dominion (100%)
b1794	Split 230 kV Line #2056 (Hornertown - Rocky Mount) and double tap line to Battleboro Substation. Expand station, install a 230 kV 3 breaker ring bus and install a 230/115 kV transformer	Dominion (100%)

## Virginia Electric and Power Company (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1795	Reconductor segment of Line #54 (Carolina to Woodland 115 kV) to a minimum of 300 MVA		Dominion (100%)
b1796	Install 115 kV 25 MVAR capacitor bank at Kitty Hawk Substation		Dominion (100%)
b1797	Wreck and rebuild 7 miles of the Dominion owned section of Cloverdale - Lexington 500 kV		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> APS (56.31%) / ATSI (2.31%) / Dayton (0.70%) / DEOK (1.72%) / Dominion (4.80%) / EKPC (0.60%) / PEPCO (33.56%)
b1798	Build a 450 MVAR SVC and 300 MVAR switched shunt at Loudoun 500 kV		<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
			<b>DFAX Allocation:</b> Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1799	Build 150 MVAR Switched Shunt at Pleasant View 500 kV	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd (13.31%)  / Dayton (2.11%) / DEOK  (3.29%) / DL (1.75%) / DPL  (2.50%) / Dominion (12.86%) /  EKPC (1.87%) / JCPL (3.74%) /  ME (1.90%) / NEPTUNE*  (0.44%) / PECO (5.34%) /  PENELEC (1.89%) / PEPCO  (3.99%) / PPL (4.84%) / PSEG  (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (0.36%) / DPL (0.07%) /  Dominion (99.36%) / ME  (0.07%) / PEPCO (0.14%)</p>
b1805	Install a 250 MVAR SVC at the existing Mt. Storm 500kV substation	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) /  APS (5.73%) / ATSI (7.88%) /  BGE (4.22%) / ComEd (13.31%)  / Dayton (2.11%) / DEOK  (3.29%) / DL (1.75%) / DPL  (2.50%) / Dominion (12.86%) /  EKPC (1.87%) / JCPL (3.74%) /  ME (1.90%) / NEPTUNE*  (0.44%) / PECO (5.34%) /  PENELEC (1.89%) / PEPCO  (3.99%) / PPL (4.84%) / PSEG  (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  APS (74.10%) / PEPCO (25.90%)</p>
b1809	Replace Brambleton 230 kV Breaker '22702'	Dominion (100%)
b1810	Replace Brambleton 230 kV Breaker '227T2094'	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.1	Surry to Skiffes Creek 500 kV Line (7 miles overhead)	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1905.2	Surry 500 kV Station Work	<p><b>Load-Ratio Share Allocation:</b>  AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p><b>DFAX Allocation:</b>  Dominion (100%)</p>
b1905.3	Skiffes Creek 500-230 kV Tx and Switching Station	Dominion (99.84%) / PEPCO (0.16%)
b1905.4	New Skiffes Creek - Whealton 230 kV line	Dominion (99.84%) / PEPCO (0.16%)
b1905.5	Whealton 230 kV breakers	Dominion (99.84%) / PEPCO (0.16%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1905.6	Yorktown 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.7	Lanexa 115 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.8	Surry 230 kV work	Dominion (99.84%) / PEPCO (0.16%)
b1905.9	Kings Mill, Peninmen, Toano, Waller, Warwick	Dominion (99.84%) / PEPCO (0.16%)
b1906.1	At Yadkin 500 kV, install six 500 kV breakers	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		<b>DFAX Allocation:</b> Dominion (100%)
b1906.2	Install a 2nd 230/115 kV TX at Yadkin	Dominion (100%)
b1906.3	Install a 2nd 230/115 kV TX at Chesapeake	Dominion (100%)
b1906.4	Uprate Yadkin – Chesapeake 115 kV	Dominion (100%)
b1906.5	Install a third 500/230 kV TX at Yadkin	Dominion (100%)
b1907	Install a 3rd 500/230 kV TX at Clover	APS (5.83%) / BGE (4.74%) / Dominion (81.79%) / PEPCO (7.64%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1908	Rebuild Lexington – Dooms 500 kV	<b>Load-Ratio Share Allocation:</b> AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) <b>DFAX Allocation:</b> Dominion (100%)
b1909	Uprate Bremono – Midlothian 230 kV to its maximum operating temperature	APS (6.31%) / BGE (3.81%) / Dominion (81.90%) / PEPCO (7.98%)
b1910	Build a Suffolk – Yadkin 230 kV line (14 miles) and install 4 breakers	Dominion (100%)
b1911	Add a second Valley 500/230 kV TX	APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)
b1912	Install a 500 MVAR SVC at Landstown 230 kV	DEOK (0.46%) / Dominion (99.54%)
b2053	Rebuild 28 mile line	AEP (100%)
b2125	Install four additional 230 kV 100 MVAR variable shunt reactor banks at Clifton, Gallows Road, Garrisonville, and Virginia Hills substations	Dominion (100%)
b2126	Install two additional 230 kV 100 MVAR variable shunt reactor banks at Churchland and Shawboro substations	Dominion (100%)

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## Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2181	Add a motor to an existing switch at Prince George to allow for Sectionalizing scheme for line #2124 and allow for Brickhouse DP to be re-energized from the 115 kV source	Dominion (100%)
b2182	Install 230kV 4-breaker ring at Enterprise 230 kV to isolate load from transmission system when substation initially built	Dominion (100%)
b2183	Add a motor to an existing switch at Keene Mill to allow for a sectionalizing scheme	Dominion (100%)
b2184	Install a 230 kV breaker at Tarboro to split line #229. Each will feed an autotransformer at Tarboro. Install switches on each autotransformer	Dominion (100%)
b2185	Uprate Line #69 segment Reams DP to Purdy (19 miles) from 41 MVA to 162 MVA by replacing 5 structures and re-sagging the line from 50C to 75C	Dominion (100%)
b2186	Install a 2nd 230-115kV transformer at Earleys connected to the existing 115kV and 230kV ring busses. Add a 115 kV breaker and 230kV breaker to the ring busses	Dominion (100%)
b2187	Install 4 - 230kV breakers at Shellhorn 230 kV to isolate load	Dominion (100%)

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