

PJM Interconnection, L.L.C. 2750 Monroe Blvd. Audubon, PA 19403

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

Re: PJM Interconnection, L.L.C., Docket No. ER21- -000

### Dear Secretary Bose:

In accordance with Schedule 12 of the PJM Open Access Transmission Tariff ("Tariff") and pursuant to section 205 of the Federal Power Act, 1 PJM Interconnection, L.L.C. ("PJM") hereby submits amendments to Schedule 12-Appendix<sup>2</sup> and Schedule 12-Appendix A<sup>3</sup> of the PJM Tariff to provide updated annual cost allocations for Regional Facilities and Necessary Lower Voltage Facilities (in Schedule 12-Appendix and

<sup>&</sup>lt;sup>1</sup> 16 U.S.C. § 824d.

<sup>&</sup>lt;sup>2</sup> The cost responsibility assignments for all projects included in the regional transmission expansion plan ("RTEP") prior to February 1, 2013, are located in Schedule 12-Appendix. See Tariff, Schedule 12, section (a)(v).

<sup>&</sup>lt;sup>3</sup> The cost responsibility assignments for all projects in the RTEP after February 1, 2013, are located in Tariff, Schedule 12-Appendix A. See id.

Schedule 12-Appendix A)<sup>4</sup> and Lower Voltage Facilities<sup>5</sup> (in Schedule 12-Appendix A only) included in the PJM RTEP.

### I. DESCRIPTION OF FILING

### A. Background

1. Cost Allocation Methodologies Prior to February 1, 2013

On April 19, 2007, the Commission issued two companion orders relating to the assignment of cost responsibility for transmission enhancements and expansions included in the RTEP.<sup>6</sup> In Opinion No. 494 in Docket Nos. EL05-121-000, et al., the Commission

<sup>4</sup> Under Tariff, Schedule 12-Appendix, "Regional Facilities" include new transmission enhancements and expansions that will operate at or above 500 kilovots ("kV"), and "Necessary Lower Voltage Facilities" include new transmission enhancements that will operate below 500 kV that must be constructed or strengthened to support new Regional Facilities. Under Tariff, Schedule 12-Appendix, only Regional Facilities and Necessary Lower Voltage Facilities are updated annually. Under Tariff, Schedule 12-Appendix A, Regional Facilities include: (i) new transmission enhancements that are alternating current ("A.C.") facilities that operate at or above 500 kV; (ii) single enhancements comprised of two A.C. circuits operating at or above 345 kV, and below 500 kV, where both circuits originate from a single substation or switching station at one end and terminate at a single substation or switching station at the other end; (iii) A.C. or direct current ("D.C.") shunt reactive resources connected to a Transmission Facility described in (i) or (ii); or (iv) D.C. facilities. Necessary Lower Voltage Facilities are defined the same for Tariff, Schedule 12-Appendix and Tariff, Schedule 12-Appendix A. See Tariff, Schedule 12, section (b)(i). Under Tariff, Schedule 12-Appendix A, Regional Facilities and Necessary Lower Voltage Facilities are updated annually and Lower Voltage Facilities are updated annually, beginning with the calendar year in which the enhancement is scheduled to enter service and thereafter annually at the beginning of each calendar year. See Tariff, Schedule 12, section (b)(iii)(H)(2).

<sup>&</sup>lt;sup>5</sup> "Lower Voltage Facilities" are facilities that are not Regional Facilities or Necessary Lower Voltage Facilities. *See* Tariff, Schedule 12, section (b)(ii).

<sup>&</sup>lt;sup>6</sup> See PJM Interconnection, L.L.C., 119 FERC ¶ 61,067 (2007) ("Rehearing Order"); 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). On August 6, 2009, the United States Court of Appeals for the Seventh Circuit, on a petition for review of Opinion Nos. 494 and 494-A, remanded these orders to the Commission for further proceedings. See Ill. Com. Comm'n v. FERC, 576 F.3d 470 (7th Cir. 2009), order on remand, PJM Interconnection, L.L.C., 138 FERC ¶ 61,230 (2012). On July 25, 2014, the United States Court of Appeals for the Seventh Circuit ("Seventh Circuit"), on a petition for review of the Commission's Order on Remand, remanded the matter for a second time to the Commission for further proceedings. See Ill. Com. Comm'n v. FERC, 756 F.3d 556 (7th Cir. 2014). On December 18, 2014, the Commission issued an Order Establishing Hearing and Settlement Judge Procedures in Docket No. EL05-121-009. See PJM Interconnection, L.L.C., 149 FERC ¶ 61,233 (2014).

accepted "PJM's proposal to fully allocate, on a region-wide basis, the costs of new, centrally-planned facilities that operate at or above 500 kV."<sup>7</sup> The Commission further directed PJM to submit a compliance filing within 30 days to implement "the necessary revisions to PJM's Tariff and Operating Agreement."8 On the same day, in the Rehearing Order in Docket Nos. ER06-456-008, et al., the Commission ordered PJM to "submit proposed revisions to its cost allocations set forth in Schedule 12-Appendix of the Tariff to reflect the allocations required by" Opinion No. 494.9 On May 21, 2007, PJM submitted the two compliance filings required by Opinion No. 494 and the Rehearing Order. 10 In the compliance filing required by Opinion No. 494, PJM specified that cost responsibility for such facilities would be allocated annually on a region-wide basis. 11 The Commission accepted both compliance filings. 12 Parties sought review of Opinion No. 494 in the Seventh Circuit. The Seventh Circuit granted the petition for review regarding the allocation of all of the costs of new transmission facilities that operate at or above 500 kV on a load-ratio share basis and remanded the case to the Commission for further proceedings. 13 On remand, the Commission affirmed the 100 percent load-ratio share for

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<sup>&</sup>lt;sup>7</sup> Opinion No. 494 at P 76. The Commission further noted that, under PJM's proposal, "lower voltage facilities that are necessary to construct a particular new project at 500 kV and above would also be rolled in to the 500 kV and above postage stamp rate." *Id.* at P 79 n.103.

<sup>&</sup>lt;sup>8</sup> *Id.* at P 83.

<sup>&</sup>lt;sup>9</sup> Rehearing Order at Ordering Paragraph (C).

<sup>&</sup>lt;sup>10</sup> PJM amended its filing in Docket Nos. ER06-456-012, et al., on July 26, 2007. *See PJM Interconnection, L.L.C.*, Amendment to Compliance Filing, Docket Nos. ER06-456-012, et al. (July 26, 2007).

<sup>&</sup>lt;sup>11</sup> See PJM Interconnection, L.L.C., Compliance Filing, Docket No. EL05-121-004, at 4 (May 21, 2007).

<sup>&</sup>lt;sup>12</sup> Opinion No. 494-A at P 92; *PJM Interconnection, L.L.C.*, 122 FERC ¶ 61,217, at PP 20-21 (2008).

<sup>&</sup>lt;sup>13</sup> See Ill. Com. Comm'n v. FERC. 576 F.3d 470.

new transmission facilities that operate at or above 500 kV.<sup>14</sup> Parties again sought review and the Seventh Circuit again reversed and remanded the Commission's determination that the costs of transmission facilities that operate at or above 500 kV should be allocated on a 100 percent load-ratio share basis.<sup>15</sup> In the second proceeding on remand, the Commission established hearing and settlement judge procedures to determine the appropriate cost allocation for the transmission projects that remained at issue in the docket (i.e., the Regional Facilities approved before February 1, 2013, whose costs were allocated in accordance with the 100 percent load-ratio share method established in Opinion

<sup>&</sup>lt;sup>14</sup> PJM Interconnection, L.L.C., 138 FERC ¶ 61,230 (2012), order on reh'g, 142 FERC ¶ 61,216 (2013).

<sup>&</sup>lt;sup>15</sup> Ill. Com. Comm'n v. FERC, 756 F.3d 556.

No. 494).<sup>16</sup> On June 15, 2016, the Settling Parties<sup>17</sup> submitted an Offer of Settlement in the docket.<sup>18</sup>

On May 31, 2018, the Commission issued an order approving the contested Settlement pending in Docket No. EL05-121-009, <sup>19</sup> finding that the overall result of the Settlement is just and reasonable. <sup>20</sup> For the going-forward period (the period commencing

<sup>&</sup>lt;sup>16</sup> *PJM Interconnection, L.L.C.*, 149 FERC ¶ 61,233, at P 2 (2014).

<sup>&</sup>lt;sup>17</sup> The Settling Parties included: 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>&</sup>lt;sup>18</sup> *PJM Interconnection*, *L.L.C.*, Offer of Settlement, Docket No. EL05-121-009 (June 15, 2016) ("Settlement").

<sup>&</sup>lt;sup>19</sup> The following parties contested the Settlement: Linden VFT, LLC ("Linden VFT"), Long Island Power Authority ("LIPA"), Neptune Regional Transmission System, LLC ("Neptune"), Hudson Transmission Partners, LLC ("Hudson"), and New York Power Authority ("NYPA") (collectively, the "Contesting MTF Parties").

<sup>&</sup>lt;sup>20</sup> *PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,168 (2018) ("May 31 Order on Contested Settlement"). The Settlement provided for a new Schedule 12-C and three appendices to be added to the Tariff, effective January 1, 2016. Specifically, Tariff, Schedule 12-C includes: (i) Appendix A (List of Covered Transmission Enhancements, including Covered Transmission Enhancements that were canceled or abandoned ("Canceled Projects") before entering service); (ii) Appendix B (50 percent cost responsibility allocations for Canceled Projects); and (iii) Appendix C (Transmission Enhancement Charge Adjustments). For purposes of this filing, only Tariff, Schedule 12-C, Appendix A and Appendix B are relevant to determine which cost allocation are to be updated.

January 1, 2016, onward) the May 31 Order on Contested Settlement accepted modifications to the cost allocation methodology for Covered Transmission Enhancements included in the Tariff, Schedule 12-Appendix to assign cost responsibility to Responsible Customers for each Covered Transmission Enhancement listed in Schedule 12-C, Appendix A,<sup>21</sup> based on the agreed-upon hybrid methodology in which (1) 50 percent of the cost responsibility shall be assigned to Responsible Customers using the annual loadratio share method;<sup>22</sup> and (2) 50 percent of the cost responsibility shall be assigned to Responsible Customers as follows: (i) for Canceled Projects identified in Schedule 12-C, Appendix A, the cost assignments are set forth in Schedule 12-C, Appendix B; and (ii) for all other projects identified in Schedule 12-C, Appendix A, cost assignments are based on solution-based distribution factor ("DFAX") method set forth in Schedule 12, section (b)(i)(A)(2)(a), which is the solution-based DFAX methodology accepted by the Commission in the March 22 Order.<sup>23</sup>

In compliance with the May 31 Order on Contested Settlement, PJM submitted in eTariff format the *pro forma* Tariff records to include a new Schedule 12-C, including Appendices A through C, as well as amendments to cost responsibility assignments to reflect such changes to Schedule 12-Appendix relative to the 2017 and 2018 annual

<sup>21</sup> For the Mid-Atlantic Power Pathway ("MAPP") and Potomac Appalachian Transmission Highline ("PATH") projects identified as Canceled Projects in Tariff, Schedule 12-C, Appendix A, 50 percent of the Canceled Projects' cost assignments are set forth in Tariff, Schedule 12-C, Appendix B.

<sup>&</sup>lt;sup>22</sup> Tariff, Schedule 12, section (b)(i)(A)(1).

<sup>&</sup>lt;sup>23</sup> PJM Interconnection, L.L.C., 142 FERC ¶ 61,214, at PP 411-48 (2013) ("March 22 Order").

updates.<sup>24</sup> By order dated December 19, 2019, the Commission denied clarification and rehearing of the May 31 Order on Contested Settlement and accepted the July 30 Compliance Filing submitted in Docket No. ER18-2102-000.<sup>25</sup> Parties sought review of, among other things, the December 19 Order in the United States Court of Appeals for the District of Columbia Circuit ("D.C. Circuit").<sup>26</sup> As of February 27, 2020, the Commission has accepted for filing all annual adjustments submitted by PJM from 2007 through 2019.<sup>27</sup>

### 2. New Cost Allocation Methodology Effective February 1, 2013

In the meantime, the PJM Transmission Owners, acting through the PJM Consolidated Transmission Owners Agreement ("CTOA"), filed,<sup>28</sup> and the Commission

<sup>24</sup> *PJM Interconnection, L.L.C.*, eTariff Compliance Filing for Schedule 12 and Schedule 12-Appendices, Docket No. ER18-2102-001 (July 30, 2018) ("July 30 Compliance Filing").

<sup>&</sup>lt;sup>25</sup> PJM Interconnection, L.L.C., 169 FERC ¶ 61,238 (2019) ("December 19 Order").

<sup>&</sup>lt;sup>26</sup> See Linden VFT, LLC v. FERC, No. 20-1273 (D.C. Cir. 2020); Long Island Power Auth. v. FERC, No. 20-1035 (D.C. Cir. 2020); Linden VFT, LLC v. FERC, No. 20-1033 (D.C. Cir. 2020).

<sup>&</sup>lt;sup>27</sup> See PJM Interconnection, L.L.C., 170 FERC ¶ 61,156 (2020); December 19 Order (accepting the July 30 Compliance Filing); PJM Interconnection, L.L.C., Compliance Filing, Docket No. ER19-745-001 (Mar. 27, 2019) (accepted by letter order dated June 11, 2019); PJM Interconnection, L.L.C., 166 FERC ¶ 61,162 (2019) (directing further compliance to correct the ministerial error regarding the NAEA Rock Spring, LLC transmission facilities); PJM Interconnection, L.L.C., 162 FERC ¶ 61,197 (2018); PJM Interconnection, L.L.C., 158 FERC ¶ 62,250 (2017), order on reh'g and clarification, 161 FERC ¶ 61,218 (2017); PJM Interconnection, L.L.C., Docket No. ER16-676-000 (Dec. 31, 2015) (accepted by letter order dated February 24, 2016); PJM Interconnection, L.L.C., Docket No. ER15-758-000 (Dec. 30, 2014) (accepted by letter order dated February 25, 2015); PJM Interconnection, L.L.C., Docket No. ER14-909-000 (Dec. 31, 2013) (accepted by letter order dated February 12, 2014); PJM Interconnection, L.L.C., Docket No. ER13-673-000 (Dec. 31, 2012) (accepted by letter order dated February 12, 2013); PJM Interconnection, L.L.C., Docket No. ER12-745-000 (Dec. 30, 2011) (accepted by letter order dated February 7, 2012); PJM Interconnection, L.L.C., Docket No. ER11-2578-000 (Dec. 30, 2010) (accepted by letter order dated February 1, 2011); PJM Interconnection, L.L.C., Docket No. ER10-529-000 (Dec. 30, 2009) (accepted by letter order dated February 17, 2010); PJM Interconnection, L.L.C., Docket No. ER09-484-000 (Dec. 30, 2008) (accepted by letter order dated February 20, 2009); and PJM Interconnection, L.L.C., Docket Nos. ER08-837-000 (Apr. 16, 2008) (accepted by letter order dated July 10, 2008).

<sup>&</sup>lt;sup>28</sup> *Pub. Serv. Elec. & Gas Co.*, PJM Open Access Transmission Tariff Revisions to Modify Cost Allocation for PJM Required Transmission Enhancements, Docket No. ER13-90-000 (Oct. 11, 2012) ("October 11 Filing").

accepted,<sup>29</sup> in Docket No. ER13-90-000, revisions to Schedule 12 modifying the cost allocation methodologies relating to the assignment of costs of transmission system expansions and enhancements approved by PJM in its development of the RTEP. The revisions were filed by the PJM Transmission Owners in compliance with the regional cost allocation requirements of Order No. 1000.<sup>30</sup> The changes included cost allocation provisions for assigning cost responsibility for all RTEP transmission enhancements, including reliability and economic projects, replacement projects and high voltage direct current transmission projects.

The March 22 Order approved the hybrid cost allocation methodology for Regional Facilities and Necessary Lower Voltage Facilities, under which 50 percent of the costs of the facilities are allocated on a region-wide, postage stamp basis while the other 50 percent are allocated to specifically-identified beneficiaries under a solution-based DFAX methodology. The region-wide, postage stamp allocations use the same annual load-ratio share methodology accepted by the Commission in Opinion No. 494-A. These revisions only applied to the cost allocations for projects included in the RTEP on a prospective basis

<sup>&</sup>lt;sup>29</sup> March 22 Order at PP 411-48.

<sup>&</sup>lt;sup>30</sup> Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000, 136 FERC ¶ 61,051 (2011), order on reh'g & clarification, Order No. 1000-A, 139 FERC ¶ 61,132, order on reh'g & clarification, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), aff'd sub nom. S.C. Pub. Serv. Auth. v. FERC, 762 F.3d 41 (D.C. Cir. 2014).

<sup>&</sup>lt;sup>31</sup> Tariff, Schedule 12 provides different DFAX-based methodologies to identify and allocate costs to specific beneficiaries depending on whether the project is designed to address one or more reliability or operational adequacy and performance issues or to relieve one or more economic constraints. *See* PJM Tariff, Schedule 12(b)(i)(A)(2). The solution-based DFAX determined allocations for projects addressing reliability issues are set at the time the project is included in the RTEP, and are revisited annually beginning with the calendar year in which a Required Transmission Enhancement is scheduled to enter service, and thereafter annually at the beginning of each calendar year. *See* Tariff, Schedule 12, section (b)(iii)(H)(2).

<sup>&</sup>lt;sup>32</sup> Opinion No. 494-A at P 92.

from February 1, 2013, and did not disturb the cost assignments or cost allocation methodologies used for projects previously included in the RTEP. To effectuate the March 22 Order, cost responsibility assignments for RTEP projects approved prior to the March 22 Order are located in Schedule 12-Appendix, and cost responsibility assignments for all RTEP projects approved after February 1, 2013 are located in Schedule 12-Appendix A. The methodology for annually updating 50 percent cost responsibility assignments on a region-wide, postage stamp basis for Regional Facilities and Necessary Lower Voltage Facilities included in Schedule 12-Appendix remained unchanged. Such methodology also applies to 50 percent of the costs of new Regional Facilities and Necessary Lower Voltage Facilities included in Schedule 12-Appendix A.<sup>33</sup> For the other 50 percent of costs for Regional Facilities and Necessary Lower Voltage Facilities and 100 percent of costs for Lower Voltage Facilities included in Schedule 12-Appendix A, PJM uses its solution-based DFAX analysis to evaluate the relative use that load in each Zone and withdrawals by merchant transmission facilities are projected to make of the new facility.<sup>34</sup> Under this hybrid methodology, PJM updates the solution-based DFAX analysis annually beginning with the calendar year in which the new facility is scheduled to enter service in order to take into account changes in the relative use of the facility due to modifications of the grid, including new transmission facilities, generation additions and retirements, and the growth and distribution of load.<sup>35</sup>

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<sup>&</sup>lt;sup>33</sup> Tariff, Schedule 12, sections (b)(i)(A)(1)(a) and (b).

<sup>&</sup>lt;sup>34</sup> October 11 Filing at 9.

<sup>&</sup>lt;sup>35</sup> Tariff, Schedule 12, section (b)(iii)(H)(2).

3. Cost Allocation Methodology for Merchant Transmission Facilities

Specific to Merchant Transmission Facilities with Firm Transmission Withdrawal Rights ("Firm TWRs"), the Commission held in Opinion No. 503 issued on November 19, 2009, that Regional Facilities and Necessary Lower Voltage Facilities should be allocated to Merchant Transmission Facilities with Firm TWRs on an annual, load-ratio share basis using the Merchant Transmission Facility's actual peak load in any given hour of the applicable year. Thus, consistent with Opinion No. 503 and in accordance with Schedule 12 of the Tariff, updated cost responsibility assignments to Merchant Transmission Facilities for Regional Facilities and Necessary Lower Voltage Facilities are based on each facility's annual peak load, up to the Firm TWRs set forth in the Merchant Transmission Facility's respective interconnection service agreement. Updated cost responsibility assignments to Merchant Transmission Facilities for Lower Voltage Facilities are based on each facility's Firm TWRs. Merchant Transmission Facilities with Non-Firm TWRs are not allocated RTEP charges for reliability projects. The stransmission of the Non-Firm TWRs are not allocated RTEP charges for reliability projects.

As of 2017, there were three Merchant Transmission Facilities in PJM with Firm TWRs: (i) Neptune, (ii) Hudson, and (iii) East Coast Power, L.L.C., a/k/a Linden VFT. These Merchant Transmission Facilities were assigned cost responsibility for Regional Facilities and Necessary Lower Voltage Facilities based on their annual peak load up to the Firm TWRs set forth in their respective interconnection service agreements and for Lower Voltage Facilities based on their Firm TWRs. During 2017, Linden VFT and

<sup>&</sup>lt;sup>36</sup> *PJM Interconnection, L.L.C.*, Opinion No. 503, 129 FERC ¶ 61,161, at P 19 (2009).

<sup>&</sup>lt;sup>37</sup> *Id.* at P 3 & n.2.

Hudson sought to convert their Firm TWRs to Non-Firm TWRs. On December 15, 2017, the Commission issued orders in Docket Nos. EL17-84<sup>38</sup> and EL17-90<sup>39</sup> directing PJM to file revised interconnection service agreements converting the Firm TWRs for Linden VFT and Hudson to Non-Firm TWRs. In Docket Nos. ER18-579 (2018 Annual RTEP Update Filing)<sup>40</sup> and ER18-680,<sup>41</sup> PJM filed to implement the conversions by eliminating assignment of cost responsibility to Linden VFT and Hudson for RTEP projects included in Schedule 12-Appendix and Schedule 12-Appendix A. On March 5, 2018, the Commission accepted the annual RTEP updates filed in Docket No. ER18-579.<sup>42</sup>

On July 19, 2018, pursuant to Rule 206(g)(1) of the Commission's rules of practice and procedures,<sup>43</sup> the Commission issued an order establishing settlement judge procedures,<sup>44</sup> which included, among other things, cost responsibility assignments specific to Linden VFT and Hudson. Settlement Judge Steven A. Glazer convened four settlement conferences in this matter.<sup>45</sup> On July 19, 2019, Settlement Judge Glazer declared an impasse in settlement proceedings.<sup>46</sup> By order dated July 22, 2019, Chief Judge Carmen A.

<sup>&</sup>lt;sup>38</sup> *PJM Interconnection, L.L.C.*, 161 FERC ¶ 61,262 (2017).

<sup>&</sup>lt;sup>39</sup> *PJM Interconnection, L.L.C.*, 161 FERC ¶ 61,264 (2017).

<sup>&</sup>lt;sup>40</sup> *PJM Interconnection, L.L.C.*, 2018 Annual RTEP Update Filing, Docket No. ER18-579-000 (Dec. 29, 2017), supplemented on January 3, 2018].

<sup>&</sup>lt;sup>41</sup> *PJM Interconnection, L.L.C.*, Revisions to Schedule 12-Appendix and Schedule 12-Appendix A, Docket No. ER18-680-000 (Jan. 19, 2018).

<sup>&</sup>lt;sup>42</sup> *PJM Interconnection, L.L.C.*, 162 FERC ¶ 61,197 (2018).

<sup>&</sup>lt;sup>43</sup> 18 C.F.R. § 206(g)(1).

<sup>&</sup>lt;sup>44</sup> Linden VFT, LLC v. PJM Interconnection, L.L.C., 164 FERC ¶ 61,034 (2018).

<sup>&</sup>lt;sup>45</sup> Linden VFT, LLC v. PJM Interconnection, L.L.C., Status Report, Docket Nos. EL15-67-003, et al. (Apr. 23, 2019).

<sup>&</sup>lt;sup>46</sup> Linden VFT, LLC v. PJM Interconnection, L.L.C., 168 FERC ¶ 63,005 (2019).

Cintron terminated the settlement proceedings and returned the matter to the Commission for disposition.<sup>47</sup> Following termination of the settlement proceedings, the Commission issued, among other things, an order dated November 21, 2019, dismissing as moot New Jersey State Agencies' and PJM Transmission Owners' respective requests for rehearing of the Commission's July 19 Order for Docket Nos. EL15-67-004, EL17-68-001, EL17-84-002, EL17-90-002, and EL17-94-001.<sup>48</sup> On November 21, 2019, the Commission issued an order denying the Complaint filed by NYPA against PJM and the PJM Transmission Owners in Docket No. EL17-94-000 arguing that PJM was violating its Tariff by continuing to invoice RTEP transmission enhancement charges following Hudson's notice that it had relinquished its Firm TWRs.<sup>49</sup>

By order dated February 20, 2020, the Commission denied a complaint filed by Linden VFT challenging certain revised cost responsibility assignments due to termination of Consolidated Edison Company of New York, Inc.'s ("Con Edison") transmission service agreements ("TSA").<sup>50</sup> On that same day,<sup>51</sup> the Commission accepted Tariff revisions to Schedule 12-Appendix and Schedule 12-Appendix A reallocating cost responsibility assignments due to the termination of the Con Edison's TSAs and denied

<sup>47</sup> *Linden VFT, LLC v. PJM Interconnection, L.L.C.*, Order of Chief Judge Terminating Settlement Judge Procedures, Docket Nos. EL15-67-003, et al. (July 22, 2019).

<sup>&</sup>lt;sup>48</sup> Linden VFT, LLC v. PJM Interconnection, L.L.C., 169 FERC ¶61,116 at P 12 n.18 (2019).

<sup>&</sup>lt;sup>49</sup> N.Y. Power Auth. v. PJM Interconnection, L.L.C., 169 FERC ¶ 61,114 (2019) ("November 21 NYPA Complaint Order") (no request for rehearing of the November 21 NYPA Complaint Order was filed in the docket).

<sup>&</sup>lt;sup>50</sup> PJM Interconnection, L.L.C., 170 FERC ¶ 61,123 (2020) ("2020 Linden VFT Complaint Order").

<sup>&</sup>lt;sup>51</sup> *PJM Interconnection, L.L.C.*, 170 FERC ¶ 61,124 (2020) ("February 20 Cost Allocation Order") (accepting revisions to cost responsibility assignments for transmission enhancements and expansions included in the RTEP due to the termination of the Con Edison's TSAs entered into between PJM and Con Edison).

requests for rehearing of the April 25, 2017 order<sup>52</sup> filed in Docket Nos. ER17-950-000, 001, 002, and 003. Also on February 20, 2020, the Commission denied requests for rehearing filed in Docket Nos. EL15-67, ER15-2562, ER14-972, and EL15-18.<sup>53</sup> On March 31, 2020, the Commission accepted in part and rejected in part PJM's compliance filing filed in Docket No. ER18-680-001 revising Merchant Transmission Facilities' cost allocation responsibility in Schedule 12-Appendix and Schedule 12-Appendix A.<sup>54</sup>

Linden VFT filed a request for rehearing of the 2020 Linden VFT Complaint Order and February 20 Cost Allocation Order.<sup>55</sup> The NYPA and Hudson jointly sought rehearing of the 2020 Linden Complaint Order.<sup>56</sup> On August 28, 2020, the Commission issued an order addressing arguments raised on rehearing sustaining the results of both the February 2020 Cost Allocation Order and the 2020 Linden VFT Complaint Order.<sup>57</sup> To date, all requests for rehearing in this proceeding have been addressed by the Commission and the matters are currently pending before the D.C. Circuit.

### 4. Cost Allocation for Form No. 715 Projects

On March 26, 2015, the PJM Transmission Owners proposed to revise the Tariff to allocate 100 percent of costs for projects included in the RTEP solely to address individual

<sup>&</sup>lt;sup>52</sup> *PJM Interconnection, L.L.C.*, 159 FERC ¶ 62,082 (2017); *see PJM Interconnection, L.L.C.*, 159 FERC ¶ 62,310 (2017) (delegated letter order on errata issued June 20, 2017).

<sup>&</sup>lt;sup>53</sup> Linden VFT, LLC v. PJM Interconnection, L.L.C., 170 FERC ¶ 61,122 (2020).

<sup>&</sup>lt;sup>54</sup> *PJM Interconnection, L.L.C.*, 170 FERC ¶ 61,295 (2020).

<sup>&</sup>lt;sup>55</sup> Linden VFT, LLC v. PJM Interconnection, L.L.C., Request for Rehearing of Linden VFT, LLC, Docket Nos. EL17-68-002, et al. (Mar. 23, 2020).

<sup>&</sup>lt;sup>56</sup> Linden VFT, LLC v. PJM Interconnection, L.L.C., Request for Rehearing of the New York Power Authority and Hudson Transmission Partners, LLC, Docket No. EL17-68-002 (Mar. 20, 2020).

<sup>&</sup>lt;sup>57</sup> PJM Interconnection, L.L.C., 172 FERC ¶ 61,176 (2020).

transmission owner Form No. 715 planning criteria to the zone of the transmission owner who filed the Form No. 715 criteria. By order dated May 22, 2015, 9 the Commission rejected the March 26 Filing finding the proposed cost allocation was inconsistent with Order No. 1000 cost allocation principles. The PJM Transmission Owners and Dayton Power and Light Company ("Dayton") filed a request for rehearing of the May 2015 Order. Following a November 12, 2015 technical conference, the Commission issued an order on February 12, 2016, granting rehearing of the May 2015 Order and accepting the PJM Transmission Owners' Form No. 715 cost allocation methodology proposed in the March 26 Filing, effective May 25, 2015. On December 9, 2016, the Commission denied rehearing of the February 2016 Order. Dominion Energy Services, Inc. ("Dominion") and Old Dominion Electric Cooperative ("ODEC") filed petitions for review of the February 2016 Order at the D.C. Circuit.

On August 3, 2018, the D.C. Circuit found that the Commission acted arbitrarily and capriciously in approving the Form No. 715 cost allocation methodology, set aside the orders, and remanded the matter back to FERC for further proceedings.<sup>62</sup> On October 16, 2018, the D.C. Circuit denied requests for panel hearing and/or clarification.

<sup>58</sup> *PJM Interconnection, L.L.C.*, Schedule 12 Revisions Regarding Allocation of Costs for Local Transmission Owner Projects, Docket No. ER15-1387-000 (Mar. 26, 2015) ("March 26 Filing").

<sup>&</sup>lt;sup>59</sup> *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,172 (2015) ("May 2015 Order").

<sup>&</sup>lt;sup>60</sup> *PJM Interconnection, L.L.C.*, 154 FERC ¶ 61,096 (2016) ("February 2016 Order").

<sup>&</sup>lt;sup>61</sup> *PJM Interconnection, L.L.C.*, 157 FERC ¶ 61,191 (2016).

<sup>&</sup>lt;sup>62</sup> Old Dominion Elec. Coop. v. FERC, 898 F.3d 1254 (D.C. Cir. 2018).

By order dated August 30, 2019,<sup>63</sup> the Commission issued an order on remand that reversed its acceptance of the Form No. 715 cost allocation methodology proposed by the PJM Transmission Owners in their March 26 Filing and directed PJM to refile assignment of cost responsibility in Schedule 12-Appendix A for Form No. 715 Projects included in the RTEP between May 25, 2015 through August 30, 2019.<sup>64</sup> In compliance with the August 30 Order on Remand, the PJM Transmission Owners submitted revisions to Tariff, Schedule 12 replacing the Form No. 715 cost allocation methodology with a provision stating "Reserved."<sup>65</sup> On September 30, 2019, Con Edison requested rehearing of the August 30 Order on Remand arguing that the August 30 Order's decision to reallocate costs and grant refunds for low voltage projects is arbitrary, capricious, an abuse of discretion and unsupported by substantial evidence.<sup>66</sup>

On October 29, 2019,<sup>67</sup> PJM submitted a filing in compliance with the August 30 Order on Remand to revise Tariff, Schedule 12-Appendix A for Form No. 715 Projects

<sup>63</sup> PJM Interconnection, L.L.C., 168 FERC ¶ 61,133 (2019) ("August 30 Order on Remand").

<sup>&</sup>lt;sup>64</sup> On September 23, 2019, ODEC and Dominion filed a request for clarification and rehearing. *See PJM Interconnection, L.L.C.*, Request for Clarification or, in the Alternative, Rehearing of Old Dominion Electric Cooperative and Dominion Energy Services, Docket Nos. ER15-1387-004, et al. (Sept. 23, 2019). On September 30, 2019, Con Edison filed a request for rehearing of the August 30 Order on Remand. *See PJM Interconnection, L.L.C.*, Request for Rehearing of Consolidated Edison Company of New York, Inc., Docket Nos. ER15-1387-004 (Sept. 30, 2019).

<sup>&</sup>lt;sup>65</sup> *PJM Interconnection, L.L.C.*, PJM Open Access Transmission Tariff, Schedule 12 Compliance Filing, Docket Nos. ER15-1387-004, et al. (Sept. 27, 2019) ("Schedule 12 Compliance Filing'). On June 2, 2020, the PJM Transmission Owners submitted a compliance filing to revise and refile each subsequent version of the Schedule 12 Tariff record, starting from the record accepted after May 25, 2015, to show the removal of the Form No. 715 cost allocation methodology. *See PJM Interconnection, L.L.C.*, PJM Transmission Owners Compliance Filing, Docket No. ER15-1387-006, et al. (June 2, 2020).

<sup>&</sup>lt;sup>66</sup> *PJM Interconnection, L.L.C.*, Request for Rehearing of Consolidated Edison Company of New York, Inc., Docket Nos. ER15-1387-004, et al. (Sept. 30, 2019).

<sup>&</sup>lt;sup>67</sup> *PJM Interconnection, L.L.C.*, Form No. 715 Cost Allocation Compliance Filing, Docket No. ER15-1344-007 (Oct. 29, 2019) ("October 29 Compliance Filing").

("Remand Projects") whose cost responsibility assignments changed as a result of the August 30 Order on Remand. On April 3, 2020, the Commission issued an order accepting the October 29 Compliance Filing.<sup>68</sup> On that same day, the Commission issued an order denying Con Edison's and Linden VFT's requests for rehearing and granting ODEC's and Dominion's request for clarification.<sup>69</sup> On May 4, 2020, requests for rehearing of the April 3 Order Accepting Compliance Filing were filed by PPL Electric Utilities Corporation ("PPL") and Dayton, jointly<sup>70</sup> and LIPA and Neptune, jointly.<sup>71</sup> Linden VFT filed a request for clarification of the April 3 Rehearing Order.<sup>72</sup> On May 20, 2020, PJM filed a request for expedited consideration of all pending clarification and rehearing requests in this proceeding.<sup>73</sup>

On August 3, 2020, the Commission issued an order denying clarification and addressing arguments raised on rehearing, finding that claims made constituted a collateral

<sup>&</sup>lt;sup>68</sup> *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,013 (2020).

<sup>&</sup>lt;sup>69</sup> *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,012 (2020) ("April 3 Rehearing Order") (denying (i) Con Edison and Linden VFT's arguments on rehearing that the Commission should have limited its response on remand solely to high-voltage facilities, which was the focus of the D.C. Circuit's discussion and (ii) Con Edison's rehearing request contending that it is inequitable for Con Edison to bear cost responsibility for the Sewaren Project, when Con Edison did not derive any benefit from the project and granting ODEC and Dominion's request for clarification that the August 30 Order on Remand requires PJM to rebill parties with interest).

<sup>&</sup>lt;sup>70</sup> *PJM Interconnection, L.L.C.*, Request for Rehearing of PPL Electric Utilities Corporation and the Dayton Power and Light Company, Docket Nos. ER15-1344-008, et al. (May 4, 2020). On May 20, 2020, Con Edison requested leave to answer and answer requesting the Commission to deny PPL/Dayton's rehearing request. *PJM Interconnection, L.L.C.*, Request for Expedited Consideration, Docket Nos. ER15-1344-008, et al. (May 20, 2020).

<sup>&</sup>lt;sup>71</sup> *PJM Interconnection, L.L.C.*, Joint Request for Rehearing of the Long Island Power Authority and Neptune Regional Transmission System, LLC, Docket Nos. ER15-1344-008, et al. (May 4, 2020).

<sup>&</sup>lt;sup>72</sup> *PJM Interconnection, L.L.C.*, Request for Clarification of Linden VFT, LLC, Docket Nos. ER15-1344-008, et al. (May 4, 2020) (request for clarification of the April 3 Rehearing Order solely with respect to how PJM should implement the April 3 Rehearing Order).

<sup>&</sup>lt;sup>73</sup> *PJM Interconnection, L.L.C.*, Request for Expedited Consideration, Docket No. ER15-1344-008, et al. (May 20, 2020).

attack on the solution-based DFAX cost allocation methodology and the Remand Projects are not considered replacement projects pursuant to Schedule 12, section (b)(xiii).<sup>74</sup> The Commission also denied Linden VFT's rehearing request to stay billing of refunds pending rehearing or appeal.<sup>75</sup> To date, all requests for rehearing in this proceeding have been addressed by the Commission and the matters are currently pending before the D.C. Circuit.

#### **B**. Updated Annual Cost Responsibility Assignments

Updated Cost Responsibility Assignments for Regional Facilities 1. and Necessary Lower Voltage Facilities under Schedule 12-Appendix and Schedule 12-Appendix A

Fifty percent of cost responsibility for Regional Facilities and Necessary Lower Voltage Facilities in Schedule 12-Appendix and Schedule 12-Appendix A will be allocated annually using the applicable peak loads peak loads of each Zone and Merchant Transmission Facility at the time of each Zone's and Merchant Transmission Facility's annual peak load from the 12-month period ending October 31 of the calendar year preceding the calendar year for which the annual cost responsibility allocation is determined.<sup>76</sup> Therefore, the updated cost responsibility assignments for Regional and Necessary Lower Voltage Facilities in the revised Tariff sections of Schedule 12-Appendix and Schedule 12-Appendix A (50 percent of costs) filed herein are based on each Zone's annual peak load from the 12-month period ending October 31, 2020.

<sup>&</sup>lt;sup>74</sup> *PJM Interconnection, L.L.C.*, 172 FERC ¶ 61,118, at PP 34-35 (2020).

<sup>&</sup>lt;sup>75</sup> *Id.* at P 37.

<sup>&</sup>lt;sup>76</sup> PJM Tariff, Schedule 12, section (b)(i)(A)(1).

2. Updates to Cost Responsibility Assignments Using Solution-Based DFAX Methodology for Covered Transmission Enhancements under Schedule 12-Appendix

Tariff, Schedule 12-C provides that 50 percent of cost responsibility for Covered Transmission Enhancements (with the exception of Canceled or Abandoned Projects identified as such in Schedule 12-C, Appendix A)<sup>77</sup> shall be assigned based on the methodology set forth in Schedule 12, section (b)(i)(A)(2)(a), which is the solution-based DFAX methodology accepted by the Commission in the March 22 Order. PJM updates the solution-based DFAX analysis annually for such Covered Transmission Enhancements consistent with Tariff, Schedule 12, section (b)(iii)(H)(2).<sup>78</sup>

3. Updates to Cost Responsibility Assignments Using Solution-Based DFAX Methodology for Regional Facilities, Necessary Lower Voltage Facilities and Lower Voltage Facilities under Schedule 12-Appendix A

Schedule 12 provides that solution-based DFAX determined cost responsibility assignments for Regional Facilities, Necessary Lower Voltage Facilities and Lower Voltage Facilities approved after February 1, 2013, and included in Schedule 12-Appendix A, are based on the analysis of flows on the new facility. The DFAX-determined allocations for projects addressing reliability issues are initially set at the time the project is included in the RTEP and are revised annually beginning with the calendar year in which a required transmission enhancement is scheduled to enter service and thereafter annually

<sup>&</sup>lt;sup>77</sup> For Canceled or Abandoned Projects (MAPP and PATH projects), 50 percent of the cost responsibility is assigned to Responsible Customers using the cost responsibility assignments set forth in Tariff, Schedule 12-C, Appendix B, which are not updated annually. *See supra* note 20.

<sup>&</sup>lt;sup>78</sup> The cost assignments for Canceled Projects in Tariff, Schedule 12-Appendix vary from the allocations set forth in Tariff, Schedule 12-C, Appendix B, effective prior to 2018, as PJM recalculated those allocations when it removed Hudson's and Linden VFT's cost responsibility once they replaced their Firm TWRs with Non-Firm TWRs, effective January 1, 2018.

at the beginning of each calendar year. PJM proposes revisions herein to update the solution-based DFAX, as appropriate for those specific Regional Facilities and Necessary Lower Voltage Facilities and Lower Voltage Facilities included in Schedule 12-Appendix A that are either scheduled to enter service or are in service in 2021.

### II. WAIVER AND EFFECTIVE DATE

PJM requests waiver of the Commission's notice requirements to permit an effective date of January 1, 2021, for the revised Tariff sections filed herein. Good cause exists for granting this waiver because the amendments to Schedule 12-Appendix and Schedule 12-Appendix A reflect the updated annual cost responsibility assignments filed in accordance with Schedule 12 of the Tariff and do not contain any new upgrades, but merely update existing cost responsibility assignments.

### III. DOCUMENTS ENCLOSED

PJM encloses the following:

- 1. This transmittal letter;
- 2. Attachment A Revised sections of Schedule 12-Appendix and Schedule 12-Appendix A of the PJM Tariff (in redlined form); and
- 3. Attachment B Revised sections of Schedule 12-Appendix and Schedule 12-Appendix A of the PJM Tariff (in clean form).

### IV. CORRESPONDENCE AND COMMUNICATIONS

Correspondence and communications with respect to this filing should be sent to the following persons:

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### V. SERVICE

PJM has served a copy of this filing on all PJM Members and on the affected state utility regulatory commissions in the PJM Region by posting this filing electronically. In accordance with the Commission's regulations, <sup>79</sup> PJM will post a copy of this filing to the FERC filings section of its internet site, located at the following link: <a href="http://www.pjm.com/documents/fercmanuals/ferc-filings.aspx">http://www.pjm.com/documents/fercmanuals/ferc-filings.aspx</a> with a specific link to the newly-filed document, and will send an email on the same date as this filing to all PJM Members and all state utility regulatory commissions in the PJM Region<sup>80</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

<sup>&</sup>lt;sup>79</sup> See 18 C.F.R. §§ 35.2(e) and 385.201(f)(3).

 $<sup>^{80}</sup>$  PJM already maintains, updates, and regularly uses email lists for all PJM Members and affected state commissions.

available through the referenced link within twenty-four hours of the filing. Also, a copy of this filing will be available on the Commission's eLibrary website located at the following link: http://www.ferc.gov/docs-filing/elibrary.aspx in accordance with the Commission's regulations and Order No. 714.<sup>81</sup>

Respectfully submitted,

By:\_

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 $<sup>^{81}</sup>$  Electronic Tariff Filings, Order No. 714, 124 FERC ¶ 61,270 (2008), final rule, Order No. 714-A, 147 FERC ¶ 61,115 (2014).

# **Attachment A**

Schedule 12 – Appendices of the PJM Open Access Transmission Tariff

(Marked / Redline Format)

### **SCHEDULE 12 – APPENDIX**

## (1) Atlantic City Electric Company

required 1		iuai Revenue Requirement	Responsible Cusiomer(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 1	ransmission Enhancements Annua	al Revenue Requirement	t 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.		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP   (14.1814.04%) / APS   (6.055.61%) / ATSI   (7.928.10%) / BGE   (4.234.36%) / ComEd   (13.2013.14%) / Dayton   (2.052.15%) / DEOK   (3.183.23%) / DL (1.681.73%)   / DPL (2.582.65%) / Dominion   (12.5613.03%) / EKPC   (1.941.77%) / JCPL   (3.823.84%) / ME (1.881.93%)   / NEPTUNE* (0.420.45%) /   OVEC (0.080.07%) / PECO   (5.315.29%) / PENELEC   (1.901.89%) / PEPCO   (3.903.82%) / PPL   (5.004.72%) / PSEG   (6.156.21%) / RE (0.250.26%)  DFAX Allocation:   AEC (10080.73%) / JCPL   (19.27%)
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%)††

<sup>\*</sup> 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 T	ransmission Enhancements	Annual Revenue Requirement	ent 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) Install 10 MVAR capacitor b1244 at Peermont 69 kV AEC (100%) substation Rebuild the Newport-South b1245 AEC (100%) Millville 69 kV line Reconductor the Monroe – b1250 AEC (100%) Glassboro 69 kV Upgrade substation b1250.1 AEC (100%) equipment at Glassboro Sherman: Upgrade 138/69 b1280 AEC (100%) kV transformers Replace Lewis 138 kV b1396 AEC (100%) breaker 'L' JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / Reconductor the existing b1398.5 Mickleton – Goucestr 230 PECO (51.08%) / PEPCO kV circuit (AE portion) (0.57%) / ECP\*\* (0.85%) / PSEG (31.46%) / RE (1.25%) Reconductor Sherman Av b1598 AEC (100%) Carl's Corner 69kV circuit Replace terminal equipments at Central b1599 AEC (100%) North 69 kV substation AEC (88.83%) / JCPL (4.74%) / HTP (0.20%) / ECP\*\* Upgrade the Mill T2 b1600 138/69 kV transformer (0.22%) / PSEG (5.78%) / RE (0.23%)Re-build 5.3 miles of the b2157 Corson - Tuckahoe 69 kV AEC (100%) circuit

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

### **SCHEDULE 12 – APPENDIX**

### (2) Baltimore Gas and Electric Company

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Add (2) 230 kV Breakers at High Ridge and install b0152 BGE (100%) two Northwest 230 kV 120 MVAR capacitors Install a 4<sup>th</sup> Waugh Chapel 500/230kV transformer, terminate the transformer BGE (85.56%) / ME (0.83%) / b0244 in a new 500 kV bay and PEPCO (13.61%) operate the existing inservice spare transformer on standby As specified in Attachment Replace both Conastone BGE (75.85%) / Dominion H-2A. Attachment 7, the b0298 500/230 kV transformers (11.54%) / ME (4.73%) / PEPCO Transmission Enhancement with larger transformers (7.88%)Charge Worksheet Replace Conastone 230 b0298.1 BGE (100%) kV breaker 500-3/2323 Add a fourth 230/115 kV transformer, two 230 kV b0474 circuit breakers and a 115 BGE (100%) kV breaker at Waugh Chapel Create two 230 kV ring buses at North West, add two 230/115 kV b0475 BGE (100%) transformers at North West and create a new 115 kV station at North West Rebuild High Ridge 230 kV substation to Breaker b0476 BGE (100%) and Half configuration Replace the Waugh BGE (90.56%) / ME (1.51%) / Chapel 500/230 kV PECO (.92%) / PEPCO (4.01%) / b0477 transformer #1 with three PPL (3.00%) single phase transformers

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

required .	ransinission Eimancements	Annual Revenue Requiremen	it Responsible Customer(s)
b0497	Install a second Conastone – Graceton 230 kV circuit		AEC (9.00%) / DPL (16.85%) / JCPL (9.64%) / ME (1.48%) / Neptune* (0.95%) / PECO (30.79%) / PPL (16.41%) / ECP** (0.29%) / PSEG (14.07%) / RE (0.52%)
b0497.1	Replace Conastone 230 kV breaker #4		BGE (100%)
b0497.2	Replace Conastone 230 kV breaker #7		BGE (100%)
b0500.2	Replace wavetrap and raise operating temperature on Conastone – Otter Creek 230 kV line to 165 deg		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%)
b0512.33	MAPP Project Install new Hallowing Point – Calvert Cliffs 500 kV circuit and associated substation work at Calvert Cliffs substation		AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Enhancements	Annual Revenue Requireme	ent Responsible Customer(s)
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE (4 <del>.23</del> 4.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
	MAPP Project Install		( <del>2.05</del> <u>2.15</u> %) / DEOK
	new Hallowing Point –		(3.183.23%) / DL (1.681.73%) /
	Calvert Cliffs 500 kV		DPL (2.582.65%) / Dominion
b0512.43	circuit and associated		( <del>12.56</del> <u>13.03</u> %) / EKPC
	substation work at		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	Calvert Cliffs substation		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			(0.42 <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO ( <del>5.31</del> <u>5.29</u> %)
			/ PENELEC ( <del>1.90</del> <u>1.89</u> %) /
			PEPCO ( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) / PSEG ( <del>6.15</del> 6.21%)
			/ RE ( <del>0.25</del> 0.26%)
1			/ KL ( <del>0.23</del> <u>0.20</u> /0)
	Rebuild both Harford –		
1.074	Perryman 110615-A and		7.67 (100)
b0729	110616-A 115 kV		BGE (100%)
	circuits		
	Replace 230 kV breaker		
	and associated CT's at		
	Riverside 230 kV on		
	2345 line; replace all		
	dead-end structures at		
b0749	Brandon Shores,		BGE (100%)
	Hawkins Point, Sollers		· · - /
	Point and Riverside;		
	Install a second		
	conductor per phase on		
	the spans entering each		
	station		

<sup>\*</sup> Neptune Regional Transmission System, LLC

Require	i Transmission Emiancements	Annual Revenue Requirement	Responsible Customer(s)
b0795	Install a 115 kV breaker at Chesaco Park		BGE (100%)
b0796	Install 2, 115 kV breakers at Gwynnbrook		BGE (100%)
b0819	Remove line drop limitations at the substation terminations for Gwynnbrook – Mays Chapel 115 kV		BGE (100%)
b0820	Remove line drop limitations at the substation terminations and replace switch for Delight – Gwynnbrook 115 kV		BGE (100%)
b0821	Remove line drop limitations at the substation terminations for Northwest – Delight 115 kV		BGE (100%)
b0822	Remove line drop limitations at the substation terminations for Gwynnbrook – Sudbrook 115 kV		BGE (100%)
b0823	Remove line drop limitations at the substation terminations for Windy Edge – Texas 115 kV		BGE (100%)
b0824	Remove line drop limitations at the substation terminations for Granite – Harrisonville 115 kV		BGE (100%)
b0825	Remove line drop limitations at the substation terminations for Harrison – Dolefield 115 kV		BGE (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC \*\*East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0826	Remove line drop limitations at the substation terminations for		BGE (100%)
	Riverside – East Point 115 kV		
b0827	Install an SPS for one year to trip a Mays Chapel 115 kV breaker one line 110579 for line overloads 110509		BGE (100%)
b0828	Disable the HS throwover at Harrisonville for one year		BGE (100%)
b0870	Rebuild each line (0.2 miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA		BGE (100%)
b0906	Increase contact parting time on Wagner 115 kV breaker 32-3/2		BGE (100%)
b0907	Increase contact parting time on Wagner 115 kV breaker 34-1/3		BGE (100%)
b1016	Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR.  Terminate new line at Graceton with a new circuit breaker.		APS (2.02%) / BGE (75.22%) / Dominion (16.10%) / PEPCO (6.66%)
b1055	Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit		BGE (100%)
b1029	Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure Lipins Corner substation		BGE (100%)
		1	2 02 (10070)

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-2.

Required	Transmission Elmancements	Annual Revenue Requirement	Responsible Customer(s)
b1030	Move the Hillen Rd substation from circuits 110507/110508 to circuits 110505/110506		BGE (100%)
b1031	Replace wire sections on Westport - Pumphrey 115 kV circuits #110521, 110524, 110525, and 110526		BGE (100%)
b1083	Upgrade wire sections of the Mays Chapel – Mt Washington circuits (110701 and 110703) to improve the rating to 260/300 SN/SE MVA		BGE (100%)
b1084	Extend circuit 110570 from Deer Park to Northwest, and retire the section of circuit 110560 from Deer Park to Deer Park tap and retire existing Deer Park Breaker		BGE (100%)
b1085	Upgrade substation wire conductors at Lipins Corner to improve the rating of Solley-Lipins Corner sections of circuits 110534 and 110535 to 275/311 MVA SN/SE		BGE (100%)
b1086	Build a new 115 kV switching station between Orchard St. and Monument St.		BGE (100%)
b1175	Apply SPS at Mt. Washington to delay load pick-up for one outage and for the other outage temporarily drop load		BGE (100%)

	T	•	•
	Transfer 6 MW of load		
b1176	from Mt. Washington –		
	East Towson		BGE (100%)
			APS (4.42%) / BGE (66.95%) /
	Duild a second Donhool		ComEd (4.12%) / Dayton
b1251	Build a second Raphael – Bagley 230 kV		(0.49%) / Dominion (18.76%) /
	Dagley 230 KV		PENELEC (0.05%) / PEPCO
			(5.21%)
			APS (4.42%) / BGE (66.95%) /
	Do build the existing	ComEd (4.12%) / Dayton	
b1251.1	Re-build the existing Raphael – Bagley 230 kV		(0.49%) / Dominion (18.76%) /
	Rapilael – Bagley 250 kV		PENELEC (0.05%) / PEPCO
			(5.21%)
	Upgrade terminal		
	equipment (remove		
b1252	terminal limitation at		
	Pumphrey Tap to bring		
	the circuit to 790N/941E		BGE (100%)

Replace the existing   Northeast 230/115 kV   transformer #3 with 500   MVA   BGE (100%)	Required	Transmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
b1253		Replace the existing		
Section	1 1050	Northeast 230/115 kV		
Box	61253	transformer #3 with 500		
Replace the Northeast 230 kV breaker '2317/315'   BGE (100%)		MVA		BGE (100%)
Solution   Section   Sec	1.1050.1	Replace the Northeast 230		
Revise   reclosing   on   Windy   Edge   115   kV   breaker '110515'   BGE (100%)	b1253.1			BGE (100%)
b1253.2   Windy   Edge   115   kV   breaker '110515'   BGE (100%)				, , ,
breaker '110515'   BGE (100%)	b1253.2	$\mathcal{E}$		
Revise reclosing on Windy Edge 115 kV breaker '110516'  BOST Revise reclosing on Windy Edge 115 kV breaker '110516'  BOST Revise reclosing on Windy Edge 115 kV breaker '110517'  BOST Revise reclosing on Windy Edge 115 kV breaker '110517'  BOST Revise reclosing on Windy Edge 115 kV breaker '110517'  BOST REVISE REVIS				BGE (100%)
b1253.3   Windy   Edge   115   kV   breaker '110516'   BGE (100%)				, ,
breaker '110516'  Revise reclosing on Windy Edge 115 kV breaker '110517'  Build a new 500/230 kV substation (Emory Grove)  b1254.1  Bundle the Emory – North West 230 kV circuits  Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration of new circuits  Construct 115 kV double termination of new circuit underground line from existing Coldspring to Erdman substation  b1267.1  b1267.2  Bundle the Emory – North West 230 kV circuits  Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)	b1253.3			
Revise reclosing on Windy Edge 115 kV breaker '110517'  Build a new 500/230 kV substation (Emory Grove)  Bundle the Emory – North West 230 kV circuits  Behald existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  b1267.2 Replace Mays Chapel 115 kV breaker '110515A'  Replace Mays Chapel 115				BGE (100%)
breaker '110517'  BGE (100%)  APS (4.07%) / BGE (53.19%) / ComEd (3.71%) / Dayton (0.50%) / Dominion (16.44%) / PENELEC (0.59%) / PEPCO (21.50%)  Budle the Emory – North West 230 kV circuits  Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  b1267.2  BGE (100%)		Revise reclosing on		,
b1254 Build a new 500/230 kV substation (Emory Grove)  b1254.1 Bundle the Emory – North West 230 kV circuits  Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  b1267.2  Bundle the Emory – North West 230 kV circuits  Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits  BGE (100%)	b1253.4	Windy Edge 115 kV		
b1254 Build a new 500/230 kV substation (Emory Grove)  b1254.1 Bundle the Emory – North West 230 kV circuits  Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration of new circuits  b1267 Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  b1267.2 Replace Mays Chapel 115 kV breaker '110515A'  Replace Mays Chapel 115 Replace Mays Chapel 115  Replace Mays Chapel 115  Replace Mays Chapel 115  Replace Mays Chapel 115  Replace Mays Chapel 115  Replace Mays Chapel 115  Replace Mays Chapel 115  Replace Mays Chapel 115  Replace Mays Chapel 115		breaker '110517'		BGE (100%)
b1254 substation (Emory Grove)  b1254.1 Bundle the Emory – North West 230 kV circuits  Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  b1267.2 Replace Mays Chapel 115 kV breaker '110515A'  Bundle the Emory – North (0.59%) / PEPCO (21.50%)  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)				APS (4.07%) / BGE (53.19%) /
substation (Emory Grove)  b1254.1  Bundle the Emory – North West 230 kV circuits  Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits  BGE (100%)  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  b1267.2  b1267.2  Replace Mays Chapel 115 kV breaker '110515A'  Replace Mays Chapel 115	L1054	Build a new 500/230 kV		ComEd (3.71%) / Dayton (0.50%) /
b1254.1 Bundle the Emory – North West 230 kV circuits  Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  b1267.2 Replace Mays Chapel 115 kV breaker '110515A'  BGE (100%)  BGE (100%)  BGE (100%)	01254	substation (Emory Grove)		Dominion (16.44%) / PENELEC
BGE (100%)  Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  BGE (100%)		-		(0.59%) / PEPCO (21.50%)
Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  b1267.2  Replace Mays Chapel 115 kV breaker '110515A'  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)	L105/11	Bundle the Emory – North		
b1267  b1267  loss b1267  b1267.1  b1267.1  b1267.2  loss b1267.2  Replace Mays Chapel 115  kV substation to a dual ring-bus configuration to enable termination of new circuits  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)	01254.1	West 230 kV circuits		BGE (100%)
b1267 dual ring-bus configuration to enable termination of new circuits  BGE (100%)  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  BGE (100%)		Rebuild existing Erdman		
configuration to enable termination of new circuits  BGE (100%)  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  BGE (100%)		115 kV substation to a		
configuration to enable termination of new circuits  BGE (100%)  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)  Replace Mays Chapel 115 kV breaker '110515A'  BGE (100%)	h1267	dual ring-bus		
circuits  BGE (100%)  Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)  Replace Mays Chapel 115 kV breaker '110515A'  BGE (100%)	01207	configuration to enable		
b1267.1 Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation  b1267.2 Replace Mays Chapel 115 kV breaker '110515A'  b1267.3 Replace Mays Chapel 115		termination of new		
b1267.1 circuit underground line from existing Coldspring to Erdman substation  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)  BGE (100%)		circuits		BGE (100%)
b1267.1 from existing Coldspring to Erdman substation  BGE (100%)  B1267.2 Replace Mays Chapel 115 kV breaker '110515A'  BGE (100%)  BGE (100%)		Construct 115 kV double		
to Erdman substation  BGE (100%)  B1267.2 Replace Mays Chapel 115 kV breaker '110515A'  BGE (100%)  BGE (100%)	h1267 1	_		
b1267.2 Replace Mays Chapel 115 kV breaker '110515A' BGE (100%)  h1267.3 Replace Mays Chapel 115	01207.1	1 0		
b1267.2 kV breaker '110515A' BGE (100%)  b1267.3 Replace Mays Chapel 115		to Erdman substation		BGE (100%)
kV breaker 110515A BGE (100%)  h1267 3 Replace Mays Chapel 115	h1267.2	1 7 1		
	01207.2	kV breaker '110515A'		BGE (100%)
BGE (100%)	b1267.3	Replace Mays Chapel 115		
		kV breaker '110579C'		BGE (100%)

Required		Annual Revenue Requirement	Responsible Customer(s)
b1544	Advance the baseline upgrade B1252 to upgrade terminal equipment removing terminal		
01344	limitation at Pumphrey Tap on BGE 230 kV circuit 2332-A		BGE (100%)
	Upgrade terminal equipment at both Brandon Shores and		
b1545	Waugh Chapel removing terminal limitation on BGE 230 kV circuit 2343		BGE (100%)
b1546	Upgrade terminal equipment at Graceton removing terminal		
01340	limitation on BGE portion of the 230 kV Graceton – Cooper circuit 2343		BGE (100%)
b1583	Replace Hazelwood 115 kV breaker '110602'		BGE (100%)
b1584	Replace Hazelwood 115 kV breaker '110604'		BGE (100%)
b1606.1	Moving the station supply connections of the Hazelwood 115/13kV station		BGE (100%)
b1606.2	Installing 115kV tie breakers at Melvale		BGE (100%)
b1785	Revise the reclosing for Pumphrey 115 kV breaker '110521 DR'		BGE (100%)
b1786	Revise the reclosing for Pumphrey 115 kV breaker '110526 DR'		BGE (100%)
b1789	Revise the reclosing for Pumphrey 115 kV breaker '110524DR'		BGE (100%)
b1806	Rebuild Wagner 115kV substation to 80kA		BGE (100%)

#### **SCHEDULE 12 – APPENDIX**

### (3) Delmarva Power & Light Company

Required 1	ransmission Enhancements Ai	nnual 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%)

Required'	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor 0.5 miles of		
b0262	Christiana – Edgemoor 138	3	DPL (100%)
	kV		
	Replace 1200 Amp		
1.02.62	wavetrap at Indian River or	1	DDI (1000()
b0263	the Indian River –		DPL (100%)
	Frankford 138 kV line		
			<b>Load-Ratio Share Allocation:</b>
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> 14.04%) / APS
			( <del>6.05</del> 5.61%) / ATSI
			( <del>7.92</del> 8.10%) / BGE
			(4.23 <u>4.36</u> %) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			$(\frac{2.05}{2.15}) / DEOK$
			( <del>3.18</del> 3.23%) / DL ( <del>1.68</del> 1.73%)
	Replace line trap and disconnect switch at Keene 500 kV substation – 5025		/ DPL (2.582.65%) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
			(1.94 <u>1.77</u> %) / JCPL
b0272.1		У	(3.823.84%) / ME (1.881.93%)
			/ NEPTUNE* ( <del>0.42<u>0.45</u></del> %) /
	Line Terminal Upgrade		OVEC ( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.90</del> 3.82%) / PPL
			( <del>5.00</del> <u>4.72</u> %) / PSEG
			( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
			<b>DFAX Allocation:</b>
			AEC (17.53%) / BGE (1.84%)
			/ DPL (43.46%) / PECO
			(18.79%) / PEPCO (1.52%) /
			PPL (13.73%) / PSEG (3.01%)
			/ RE (0.12%)
	Install 46 MVAR capacitor	S	
b0282	on the DPL distribution		DPL (100%)
	system		, ,
	Replace 1600A disconnect		
	switch at Harmony 230 kV		
10000	and for the Harmony –		(455)
b0291	Edgemoor 230 kV circuit,		DPL (100%)
	increase the operating		
	temperature of the		
	temperature of the		

conductor	

<sup>\*</sup>Neptune Regional Transmission System, LLC
\*\*East Coast Power, LLC
\*\*\*Hudson Transmission Partners, LLC

Required	Fransmission Enhancements A	nnual Revenue Requirement	Responsible Customer(s)
	Raise conductor		DPL (100%)
b0295	temperature of North		
	Seaford – Pine Street –		
	Dupont Seaford		
b0296	Rehoboth/Cedar Neck Tap		DPL (100%)
00270	(6733-2) upgrade		D12 (10070)
	Create a new 230 kV station		
	that splits the 2 <sup>nd</sup> Milford to		
	Indian River 230 kV line,		
b0320	add a 230/69 kV		DPL (100%)
	transformer, and run a new		
	69 kV line down to		
	Harbeson 69 kV		
b0382	Cambridge Sub – Close		DPL (100%)
00302	through to Todd Substation		D12 (10070)
b0383	Wye Mills AT-1 and AT-2		DPL (100%)
00303	138/69 kV Replacements		D1 E (10070)
b0384	Replace Indian River AT-20		DPL (100%)
00301	(400 MVA)		D1 E (10070)
b0385	Oak Hall to New Church		DPL (100%)
00303	(13765) Upgrade		D1 E (10070)
b0386	Cheswold/Kent (6768)		DPL (100%)
	Rebuild		D12 (10070)
b0387	N. Seaford – Add a 2 <sup>nd</sup>		DPL (100%)
00307	138/69 kV autotransformer		D12 (10070)
b0388	Hallwood/Parksley (6790-2)		DPL (100%)
00300	Upgrade		D1 E (10070)
b0389	Indian River AT-1 and AT-		DPL (100%)
00307	2 138/69 kV Replacements		DIE (10070)
b0390	Rehoboth/Lewes (6751-1		DPL (100%)
00370	and 6751-2) Upgrade		DI L (10070)
b0391	Kent/New Meredith (6704-		DPL (100%)
00371	2) Upgrade		DI L (10070)
	East New Market Sub –		
b0392	Establish a 69 kV Bus		DPL (100%)
	Arrangement		
	Increase the temperature		
	ratings of the Edgemoor –		
b0415	Christiana – New Castle		DPL (100%)
	138 kV by replacing six		
	transmission poles		

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 2nd 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%)	Required	Transmission Enhancements Ar	inuai Revenue Requirement	Responsible Customer(s)
DPL (100%)   DPL (100%)	b0437	, <del>*</del>		DPL (100%)
DPL (100%)   DPL				
DPL (100%)   DPL (100%)	b0441			DPL (100%)
B0480   69 kV   BPL (100%)				
Replace wave trap at Indian   River 138 kV on the Omar -   Indian River 138 kV circuit	b0480			DPL (100%)
DPL (100%)   DPL (100%)				
Indian River 138 kV circuit	1-0401			DDI (1000/)
B0482   Rebuild Millsboro - Zoar   REA 69 kV   Replace Church 138/69 kV   Bo483   transformer and add two breakers   Build Oak Hall - Wattsville   138 kV line   DPL (100%)	00481			DPL (100%)
b0482         REA 69 kV         DPL (100%)           b0483         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         DPL (100%)				
Replace Church 138/69 kV   transformer and add two   breakers	b0482			DPL (100%)
b0483 transformer and add two breakers  b0483.1 Build Oak Hall – Wattsville 138 kV line  b0483.2 Add 138/69 kV transformer at Wattsville  b0483.3 Establish 138 kV bus position at Oak Hall  b0484 Re-tension Worcester – Berlin 69 kV for 125°C  b0485 Re-tension Taylor – North Seaford 69 kV for 125°C  b0494.1 Install a 2 <sup>nd</sup> Red Lion 230/138 kV  b0494.2 Hares Corner – Relay Improvement  b0494.3 Reybold – Relay Improvement  b0494.4 New Castle – Relay  DPL (100%)  DPL (100%)  DPL (100%)				
breakers   Build Oak Hall – Wattsville   138 kV line   DPL (100%)	1.0402	l ±		DDI (1000()
Build Oak Hall - Wattsville   138 kV line   DPL (100%)	b0483			DPL (100%)
b0483.1       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       DPL (100%)				
138 kV line	b0483.1			DPL (100%)
b0483.2 at Wattsville b0483.3 Establish 138 kV bus position at Oak Hall  b0484 Re-tension Worcester - Berlin 69 kV for 125°C  b0485 Re-tension Taylor - North Seaford 69 kV for 125°C  b0494.1 Install a 2 <sup>nd</sup> Red Lion 230/138 kV  b0494.2 Hares Corner - Relay Improvement  b0494.3 Reybold - Relay Improvement  b0494.4 New Castle - Relay  DPL (100%)  DPL (100%)  DPL (100%)  DPL (100%)				, ,
b0483.3   Establish 138 kV bus   position at Oak Hall   DPL (100%)	b0483.2			DPL (100%)
DPL (100%)				,
Doc   Doc	b0483.3			DPL (100%)
Berlin 69 kV for 125°C   DPL (100%)				
Berlin 69 kV for 125°C   DPL (100%)	b0484			DPL (100%)
Seaford 69 kV for 125°C   DPL (100%)				212 (10070)
Seaford 69 kV for 125°C	b0485			DPL (100%)
b0494.1 230/138 kV  b0494.2 Hares Corner – Relay Improvement  b0494.3 Reybold – Relay Improvement  b0494.4 New Castle – Relay  DPL (100%)  DPL (100%)	00105			D12 (10070)
230/138 kV	b0494 1			DPL (100%)
DPL (100%)   Improvement   DPL (100%)   b0494.3   Reybold – Relay   DPL (100%)   b0494.4   New Castle – Relay   DPL (100%)	00171.1			DIE (10070)
Improvement	b0494.2	•		DPL (100%)
b0494.3   Improvement   DPL (100%)   b0494.4   New Castle – Relay   DPL (100%)	UUT/T.2	*		DI L (10070)
h0494 4 New Castle – Relay  DPI (100%)	b0/19/1/3	1 -		DPI (100%)
60494 4 1 1)PI (100%)	UUT/ <del>1</del> .J	±		DI L (10070)
Improvement DIL (100%)	b0494-4	New Castle – Relay		DPI (100%)
	00494.4	Improvement		DI L (10070)

	Required	ransmission Ennancements Ar	inual Revenue Requirement	Responsible Customer(s)
				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> <u>14.04</u> %) / APS
				( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
				/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
				( <del>13.20</del> 13.14%) / Dayton
				( <del>2.05</del> <u>2.15</u> %) / DEOK
				( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
				DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
				( <del>12.56</del> <u>13.03</u> %) / EKPC
		MAPP Project – install new		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
		500 kV transmission from		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		Possum Point to Calvert		( <del>0.42</del> <u>0.45</u> %) / OVEC
	b0512	Cliffs and install a DC line		( <del>0.08</del> <u>0.07</u> %) / PECO
	00312	from Calvert Cliffs to		( <del>5.31</del> <u>5.29</u> %) / PENELEC
		Vienna and a DC line from		( <del>1.90</del> 1.89%) / PEPCO
		Calvert Cliffs to Indian		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
		River		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
				( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:
				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%) /
ļ				RE (0.54%)
	b0513	Rebuild the Ocean Bay –		DDI (1000/)
	00313	Maridel 69 kV line		DPL (100%)
ŀ		Replace existing 12 MVAR		
	b0527	capacitor at Bethany with a		DPL (100%)
	30321	30 MVAR capacitor		DI E (10070)
ŀ		Replace existing 69/12 kV		
	b0528	transformer at Bethany with		DPL (100%)
	00520	a 138/12 kV transformer		212 (10070)
L		a 156/12 K v dulibiolillel		

<sup>\*</sup>Neptune Regional Transmission System, LLC

required	Transmission Enhancements A	nnual Revenue Requirement	Responsible Customer(s)
b0529	Install an additional 8.4 MVAR capacitor at		DPL (100%)
3002	Grasonville 69 Kv		212 (10070)
b0530	Replace existing 12 MVAR capacitor at Wye Mills with a 30 MVAR capacitor		DPL (100%)
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%)

<sup>\*\*</sup>East Coast Power, LLC

Required	Transmission Enhancements Ar	inual Revenue Requirement	Responsible Customer(s)
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%)
b0751	Add two additional breakers at Keeney 500 kV		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS  (6.055.61%) / ATSI (7.928.10%)  / BGE (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%) /  DPL (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%)  / ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC  (0.080.07%) / PECO  (5.315.29%) / PENELEC  (1.901.89%) / PEPCO  (3.903.82%) / PPL (5.004.72%) /  PSEG (6.156.21%) / RE  (0.250.26%)  DFAX Allocation:  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		DPL (100%)

transformer, and operate the	
34.5 kV bus normally open	

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

required	Tansinission Emiancements Ai	iliuai Keveliue Kequilemeni	Responsible Cusiomer(s)
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%)
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%)

<sup>\*</sup> 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.

<sup>\*\*</sup>East Coast Power, LLC

<sup>\*\*\*</sup>Hudson Transmission Partners, LLC

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%)

#### **SCHEDULE 12 – APPENDIX**

#### (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Required	Transmission Elmancements F	innual Revenue Requirem	icht 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\*East Coast Power, L.L.C.

#### (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Kequileu	Transmission Enhancements	Amiuai Kevenue Kequiren	ient Responsible Customer(s)
	Construct a 230 kV		
	Bernville station by		
	tapping the North Temple –		
b0653	North Lebanon 230 kV		
00033	line. Install a 230/69 kV		
	transformer at existing		
	Bernville 69 kV station		ME (100%)
1.1000	Replace Portland 115kV		
b1000	breaker '95312'		NE (1000()
			ME (100%)
b1001	Replace Portland 115kV		
01001	breaker '92712'		ME (1000/)
	Davidson Handson 115		ME (100%)
b1002	Replace Hunterstown 115		N (TE (1000())
	kV breaker '96392'		ME (100%)
b1003	Replace Hunterstown 115		
01003	kV breaker '96292'		ME (100%)
b1004	Replace Hunterstown 115		
01004	kV breaker '99192'		ME (100%)
	Replace existing Yorkana		
	230/115 kV transformer		
	banks 1 and 4 with a		
b1061	single, larger transformer		
	similar to transformer bank		
	#3		ME (100%)
			ME (100%)
b1061.1	Replace the Yorkana 115		NET (1000()
	kV breaker '97282'		ME (100%)
b1061.2	Replace the Yorkana 115		
01001.2	kV breaker 'B282'		ME (100%)
	Replace the limiting bus		
	conductor and wave trap at		
b1302	the Jackson 115 kV		
	terminal of the Jackson –		
	JE Baker Tap 115 kV line		ME (100%)
	Reconductor the		2.22 (10070)
	Middletown – Collins 115		
b1365	kV (975) line 0.32 miles of		
	, , ,		ME (100%)
	336 ACSR		ME (100%)

<sup>\*</sup> 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 Requirem	nent Responsible Customer(s)
	Reconductor the Collins –		
b1366	Cly – Newberry 115 kV		
01300	(975) line 5 miles with 795		
	ACSR		ME (100%)
	Reconductor 2.4 miles of		
	existing 556 and 795		
1.4505	ACSR from Harley		
b1727	Davidson to Pleasureville		
	115 kV with 795 ACSS to		
	raise the ratings		ME (100%)
	Taise the fathigs		Load-Ratio Share
			Allocation:
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> 14.04%) / APS
			( <del>6.05</del> 5.61%) / ATSI
			( <del>7.92</del> 8.10%) / BGE
			(4.234.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			(2.052.15%) / DEOK
			( <del>3.18</del> 3.23%) / DL
			( <del>1.68</del> 1.73%) / DPL
			$(\frac{2.58}{2.65\%})$ / Dominion
			( <del>12.56</del> 13.03%) / EKPC
	b1800 Install a 500 MVAR SVC at the existing Hunterstown 500kV substation		( <del>1.94</del> 1.77%) / JCPL
b1800			( <del>3.82</del> 3.84%) / ME
			( <del>1.88</del> 1.93%) / NEPTUNE*
			( <del>0.420</del> .45%) / OVEC
			( <del>0.08</del> 0.07%) / PECO
			( <del>5.31</del> 5. <del>29%</del> ) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL
			( <del>5.00</del> 4.72%) / PSEG
			( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			<del>DL (0.02%) /</del> DPL
			( <del>36.96</del> 45.54%) / <del>JCPL</del>
			<del>(0.04%) /</del> ME ( <del>62.90</del> <u>54.46</u> %)
			/ PSEG (0.08%)
h1001	Build a 250 MVAR SVC at		AEC (6.47%) / AEP (2.58%) /
b1801	Altoona 230 kV		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%

<sup>\*</sup>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)

Customer	(S)	
	Replace SCCIR (Sub-	
b1816.5	conductor) at Hunterstown	
01010.3	Substation on the No. 1,	
	230/115 kV transformer	ME (100%)
	Replace limiting wave trap,	
	circuit breaker, substation	
b1999	conductor, relay and	
	current transformer	
	components at Northwood	ME (100%)
	Replace limiting wave trap	
b2000	on the Glendon -	
	Hosensack line	ME (100%)
	Replace limiting circuit	
	breaker and substation	
b2001	conductor transformer	
	components at Portland	
	230kV	ME (100%)
b2002	Northwood 230/115 kV	
02002	Transformer upgrade	ME (100%)
	Construct a new North	
b2023	Temple - Riverview -	
02023	Cartech 69 kV line (4.7	
	miles) with 795 ACSR	ME (100%)
	Upgrade 4/0 substation	
b2024	conductors at Middletown	
	69 kV	ME (100%)
	Upgrade 4/0 and 350 Cu	
	substation conductors at	
b2025	the Middletown Junction	
02028	terminal of the Middletown	
	Junction - Wood Street Tap	
	69 kV line	ME (100%)
	Upgrade an OC protection	
b2026	relay at the Baldy 69 kV	
	substation	ME (100%)
	Install a 115 kV 28.8	
b2148	MVAR capacitor at	
	Pleasureville substation	ME (100%)

## (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

#### **SCHEDULE 12 – APPENDIX**

#### (7) Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone

	Required T	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> 14.04%) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI
			( <del>7.92</del> <u>8.10</u> %) / BGE
			(4.23 <u>4.36</u> %) / ComEd
		Build 500 kV substation	( <del>13.20</del> <u>13.14</u> %) / Dayton
		in PENELEC – Tap the	( <del>2.05</del> <u>2.15</u> %) / DEOK
		Keystone – Juniata and	(3.183.23%) / DL (1.681.73%)
		Conemaugh – Juniata 500	/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	b0284.1	kV, connect the circuits	( <del>12.56</del> <u>13.03</u> %) / EKPC
		with a breaker and half	( <del>1.94</del> <u>1.77</u> %) / JCPL
		scheme, and install new	( <del>3.82</del> <u>3.84</u> %) / ME ( <del>1.88</del> <u>1.93</u> %)
		400 MVAR capacitor	/ NEPTUNE* ( <del>0.42</del> <u>0.45</u> %) /
		400 W VAR capacitor	OVEC (0.080.07%) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.90</del> <u>3.82</u> %) / PPL
			( <del>5.00</del> 4.72%) / PSEG
			( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
		Replace wave trap and upgrade a bus section at	( <del>6.05</del> <u>5.61</u> %) / ATSI
			( <del>7.92</del> <u>8.10</u> %) / BGE
			( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			(3.183.23%) / DL (1.681.73%)
			/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	b0284.3	Keystone 500 kV – on the	( <del>12.56</del> <u>13.03</u> %) / EKPC
		Keystone – Airydale 500	( <del>1.94</del> <u>1.77</u> %) / JCPL
		kV	( <del>3.82</del> <u>3.84</u> %) / ME ( <del>1.88</del> <u>1.93</u> %)
			/ NEPTUNE* ( <del>0.42</del> <u>0.45</u> %) /
			OVEC ( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.90</del> <u>3.82</u> %) / PPL
			( <del>5.00</del> 4.72%) / PSEG
			(6.156.21%) / RE $(0.250.26%)$

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\* East Coast Power, L.L.C.

\*\*\*Hudson Transmission Partners, LLC

Required T	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI
		( <del>7.92</del> <u>8.10</u> %) / BGE
		(4.23 <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> <u>2.15</u> %) / DEOK
	Replace wave trap at	( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %)
	Keystone 500 kV – on the	/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
b0285.1	Keystone – Conemaugh	( <del>12.56</del> <u>13.03</u> %) / EKPC
	500 kV	( <del>1.94</del> <u>1.77</u> %) / JCPL
	300 R V	( <del>3.82</del> <u>3.84</u> %) / ME ( <del>1.88</del> <u>1.93</u> %
		/ NEPTUNE* ( <del>0.42</del> <u>0.45</u> %) /
		OVEC ( <del>0.08</del> <u>0.07</u> %) / PECO
		( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> 3.82%) / PPL
		( <del>5.00</del> <u>4.72</u> %) / PSEG
		(6.156.21%) / RE (0.250.26%)
		AEC ( <del>1.72</del> 1.71%) / AEP
	Replace wave trap and relay at Conemaugh 500	( <del>14.18<u>14.04</u>%) / APS</del>
		( <del>6.05</del> <u>5.61</u> %) / ATSI
		( <del>7.92</del> <u>8.10</u> %) / BGE
		(4.23 <u>4.36</u> %) / ComEd
		( <del>13.20</del> 13.14%) / Dayton
		(2.052.15%) / DEOK
		(3.183.23%) / DL (1.681.73%)
1.0205.2		/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
b0285.2	kV – on the Conemaugh –	( <del>12.56</del> <u>13.03</u> %) / EKPC
	Keystone 500 kV	( <del>1.94</del> <u>1.77</u> %) / JCPL
		(3.823.84%) / ME (1.881.93%)
		/ NEPTUNE* (0.420.45%) /
		OVEC (0.080.07%) / PEOO
		(5.31 <u>5.29</u> %) / PENELEC
		(1.901.89%) / PEPCO
		(3.903.82%) / PPL
		(5.00 <u>4.72</u> %) / PSEG
		( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)

<sup>\*</sup> Neptune Regional Transmission System, LLC \*\* East Coast Power, L.L.C.

<sup>\*\*\*</sup>Hudson Transmission Partners, LLC

Required 7	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 (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)
b0370	Install 500 MVAR Dynamic Reactive Device at Airydale 500 kV substation	AEC (1.721.71%) / AEP  (14.1814.04%) / APS  (6.055.61%) / ATSI  (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%)  / DPL (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL  (3.823.84%) / ME (1.881.93%)  / NEPTUNE* (0.420.45%) /

	OVEC (0.080.07%) / PECO
	( <del>5.31</del> <u>5.29</u> %) / PENELEC
	( <del>1.90</del> <u>1.89</u> %) / PEPCO
	( <del>3.90</del> <u>3.82</u> %) / PPL
	( <del>5.004.72</del> %) / PSEG
	$(6.15\underline{6.21}\%) / RE (0.25\underline{0.26}\%)$

<sup>\*</sup> Neptune Regional Transmission System, LLC

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

\*\*\*Hudson Transmission Partners, LLC

Required	Fransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share
			Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI
			( <del>7.92</del> 8.10%) / BGE
			(4.234.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
			(3.183.23%) / DL (1.681.73%)
			/ DPL (2.582.65%) / Dominion
			( <del>12.56</del> 13.03%) / EKPC
			( <del>1.94</del> 1.77%) / JCPL
	T		( <del>3.82</del> 3.84%) / MÉ ( <del>1.88</del> 1.93%)
	Install 300 MVAR		/ NEPTUNE* (0.420.45%) /
b0376	capacitor at Conemaugh		OVEC (0.080.07%) / PECO
	500 kV substation		( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL
			( <del>5.00</del> 4.72%) / PSEG
			( <del>6.15</del> 6.21%) / RE ( <del>0.25</del> 0.26%)
'			DFAX Allocation:
			AEC (5.58%) / BGE
			$(\frac{21.2618.21\%)}{\text{JCPL}}$
			( <del>18.75</del> 18.24%) / ME
			( <del>14.00</del> 11.07%) / NEPTUNE
			( <del>2.11</del> 2.03%) / PECO
			( <del>18.78</del> 18.80%) / PSEG
			( <del>24.11</del> 25.07%) / RE
			( <del>0.99</del> 1.00%)
1.0.4.42	Spare Keystone 500/230		
b0442	kV transformer		PENELEC (100%)
	Replace Lewistown		
b0515	circuit breaker 1LY		
00313	Yeagertown		DENIEL EC (1000/)
		-	PENELEC (100%)
	Replace Lewistown		
b0516	circuit breaker 2LY		
	Yeagertown		PENELEC (100%)
10=1=	Replace Shawville bus		
b0517	section circuit breaker		DENIEL EC (100%)
	Strong off care of care		PENELEC (100%)

b0518	Replace Homer City circuit breaker 201	
	Johnstown	PENELEC (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\* East Coast Power, L.L.C.
\*\*\*Hudson Transmission Partners, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Keystone circuit b0519 breaker 4 Transformer - 20 **PENELEC** (100%) **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP  $(\frac{14.18}{14.04}\%)$  / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (3.183.23%) / DL (<del>1.68</del>1.73%) / DPL (2.582.65%) / Dominion (<del>12.56</del>13.03%) / EKPC (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) / ME (1.881.93%) / NEPTUNE\* Install 250 MVAR (0.420.45%) / OVEC b0549 capacitor at Keystone 500 kV (0.080.07%) / PECO (<del>5.31</del>5.29%) / PENELEC (<del>1.90</del><u>1.89</u>%) / PEPCO (3.903.82%) / PPL (<del>5.004.72</del>%) / PSEG (<del>6.15</del>6.21%) / RE (<del>0.25</del>0.26%) **DFAX Allocation:** AEC (4.265.55%) / ATSI (0.03%)/-BGE (<del>26.21</del>22.16%) / <del>DL (0.01%) /</del> JCPL (15.5316.44%) / ME (14.8612.45%) / NEPTUNE (<del>1.75</del>1.83%) / PECO (<del>17.49</del>18.75%) / PSEG (<del>19.08</del>21.95%) / RE (0.780.87%)AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL Install 25 MVAR capacitor (18.16%) / ME (1.55%) / at Lewis Run 115 kV Neptune\* (1.77%) / PECO b0550 (21.78%) / PPL (6.40%) / substation ECP\*\* (0.73%) / PSEG (26.13%) / RE (0.97%)

		AEC (8.58%) / APS (1.69%) /
		DPL (12.24%) / JCPL
	Install 25 MVAR capacitor	(18.16%) / ME (1.55%) /
b0551	at Saxton 115 kV	Neptune* (1.77%) / PECO
	substation	(21.78%) / PPL (6.40%) /
		ECP** (0.73%) / PSEG
		(26.13%) / RE (0.97%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

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

\*\*\*Hudson Transmission Partners, LLC

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required	Transmission Emiancements	Annual Revenue Requirement	it Responsible Cusiomer(s)
	Reconfigure the Cambria Slope 115 kV and		
b0654	Wilmore Junction 115 kV		
	stations to eliminate		
	Wilmore Junction 115 kV		
	3-terminal line		PENELEC (100%)
	Reconfigure and expand		
	the Glade 230 kV ring bus		
b0655	to eliminate the Glade		
	Tap 230 kV 3-terminal		
	line		PENELEC (100%)
	Add three breakers to		
b0656	form a ring bus at Altoona		
	230 kV		PENELEC (100%)
	Upgrade the Homer City		
b0794	230 kV breaker 'Pierce		
	Road'		PENELEC (100%)
1.1007	Replace Glory 115 kV		
b1005	breaker '#7 XFMR'		
			PENELEC (100%)
	Replace Shawville 115		
b1006	kV breaker 'NO.14		
	XFMR'		PENELEC (100%)
1.400	Replace Shawville 115		
b1007	kV breaker 'NO.15		
	XFMR'		PENELEC (100%)
1.1000	Replace Shawville 115		
b1008	kV breaker '#1B XFMR'		
			PENELEC (100%)
1.1000	Replace Shawville 115		
b1009	kV breaker '#2B XFMR'		
			PENELEC (100%)
	Replace Shawville 115		
b1010	kV breaker 'Dubois'		
			PENELEC (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\* East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Shawville 115 b1011 kV breaker 'Philipsburg' **PENELEC** (100%) Replace Shawville 115 b1012 kV breaker 'Garman' **PENELEC** (100%) Replace a CRS relay at Hooversville 115 kV b1059 station **PENELEC** (100%) Replace a CRS relay at b1060 Rachel Hill 115 kV station PENELEC (100%) AEC (3.74%) / APS (6.26%) / BGE (16.82%) / DL (0.32%) / Upgrade Conemaugh JCPL (12.57%) / ME (6.89%) / 500/230 kV transformer PECO (11.53%) / PEPCO b1153 and add a new line from (0.55%) / PPL (15.42%) / PSEG Conemaugh-Seward 230 (20.52%) / RE (0.72%) / kV NEPTUNE\* (1.70%) / ECP\*\* (2.96%)Revise the reclosing on the Shelocta 115 kV b1153.1 breaker 'Lucerne' **PENELEC** (100%) Replace Shawville 115 b1169 kV breaker '#1A XFMR' PENELEC (100%) Replace Shawville 115 b1170 kV breaker '#2A XFMR' **PENELEC** (100%) Build a new Osterburg East – Bedford North 115 b1277 kV Line, 5.7 miles of 795 ACSR PENELEC (100%) Install 25 MVAR b1278 Capacitor Bank at

**PENELEC** (100%)

Somerset 115 kV

Required T	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Replace the Cambria		
b1367	Slope 115/46 kV 50		
	MVA transformer with		
	75 MVA		PENELEC (100%)
	Replace the Claysburg		
1.1260	115/46 kV 30 MVA		
b1368	transformer with 75		
	MVA		PENELEC (100%)
	Replace the 4/0 CU		
	substation conductor with		
b1369	795 ACSR on the		
	Westfall S21 Tap 46 kV		
	line		PENELEC (100%)
	T . 11 0 1 1 1 5 /4 6 1 3 7		` ,
b1370	Install a 3rd 115/46 kV		
	transformer at Westfall		PENELEC (100%)
	Reconductor 2.6 miels of		
b1371	the Claysburg – HCR 46		
	kV line with 636 ACSR		PENELEC (100%)
	Replace 4/0 CU		,
	substation conductor with		
b1372	795 ACSR on the		
	Hollidaysburg – HCR 46		
	kV		PENELEC (100%)
	Re-configure the Erie		
	West 345 kV substation,		
b1373	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%)
	Reconductor 0.8 miles of		
b1535	the Gore Junction – ESG		
	Tap 115 kV line with 795		
	ACSS		PENELEC (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\* East Coast Power, L.L.C.

required i	Tarismission Emiancements	Allitual Nevertue Nequiternen	t Responsible Customer(s)
	Reconductor the New		
b1607	Baltimore - Bedford		
	North 115 kV		PENELEC (100%)
1.1600	Construct a new 345/115		
	kV substation and loop		
b1608	the Mansfield - Everts		APS (8.61%) / PECO (1.72%) /
	115 kV		PENELEC (89.67%)
	Construct Four Mile		
	Junction 230/115 kV		
	substation. Loop the Erie		
1.1.600	South - Erie East 230 kV		
b1609	line, Buffalo Road -		
	Corry East and Buffalo		
	Road - Erie South 115		APS (4.86%) / PENELEC
	kV lines		(95.14%)
			,
b1610	Install a new 230 kV		
01010	breaker at Yeagertown		PENELEC (100%)
	Install a 345 kV breaker		TENEEDE (10070)
b1713	at Erie West and relocate		
01713	Ashtabula 345 kV line		PENELEC (100%)
	Install a 75 MVAR cap	+	TENEEDE (10070)
b1769	bank on the Four Mile		
01707	230 kV bus		PENELEC (100%)
	Install a 50 MVAR cap		TENELLE (100%)
b1770	bank on the Buffalo Road		
	115 kV bus		DENEL EC (100%)
	113 KV bus		PENELEC (100%)
b1802			AEC (6.47%) / AEP (2.58%) / APS (6.88%) / BGE (6.57%) / /
	David a 100 MWAD Front		
	Build a 100 MVAR Fast		DPL (12.39%) / Dominion
	Switched Shunt and 200		(14.89%) / JCPL (8.14%) / ME
	MVAR Switched Shunt		(6.21%) / NEPTUNE* (0.82%)
	at Mansfield 345 kV		/ PECO (21.56%) / PPL
			(4.89%) / PSEG (8.18%) / RE
			(0.33%) / ECP** (0.09%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

Annual Revenue Requirement

Responsible Customer(s)

PENELEC (100%)

PENELEC (100%)

PENELEC (100%)

PENELEC (100%)

PENELEC (100%)

115 kV breaker 'Union b1821 City' **PENELEC** (100%) Construct a 115 kV ring bus at Claysburg Substation. Bedford b1943 North and Saxton lines will no longer share a common breaker **PENELEC** (100%) Reconductor Eclipse substation 115 kV bus b1944 with 1033 kcmil conductor PENELEC (100%) Install second 230/115 kV autotransformer at b1945 Johnstown PENELEC (100%) Replace the 1200 Amp Line trap at Lewistown

Valley

Required Transmission Enhancements

Replace the Erie South

on the Raystown-

Lewistown 230 kV line and replace substation conductor at Lewistown

Replace the Blairsville

138/115 kV transformer

Install a 25 MVAR 115

Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the

Homer City-Stolle Road 345 kV line into Farmers

Reconductor Cambria Slope-Summit 115kV

with 795 ACSS Conductor

kV Capacitor at Grandview

b1966

b1967

b1990

b1991

b1992

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

rioquirou i		I minual revenue requirement	
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%)

		<u> </u>	
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville		PENELEC (100%)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

#### **SCHEDULE 12 – APPENDIX**

### (8) PECO Energy Company

Required T	Fransmission Enhancements	Annual Revenue Requireme	nt Responsible Customer(s)
			Load-Ratio Share
			Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> 14.04%) / APS
			( <del>6.05</del> 5.61%) / ATSI
			( <del>7.92</del> 8.10%) / BGE
			(4.234.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
			( <del>3.183.23</del> %) / DL ( <del>1.68</del> 1.73%)
	Replace two 500 kV		/ DPL (2.582.65%) / Dominion
	circuit breakers and two		( <del>12.56</del> 13.03 %) / EKPC
	wave traps at Elroy		( <del>1.94</del> 1.77%)/JCPL
b0171.1	substation to increase		( <del>3.82</del> 3.84%) / ME ( <del>1.88</del> 1.93%)
	rating of Elroy -		/ NEPTUNE* ( <del>0.42</del> 0.45%) /
	Hosensack 500 kV		OVEC (0.080.07%) / PECO
			( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL
			( <del>5.004</del> .72%)/PSEG
			( <del>6.156.21</del> %) / RÉ ( <del>0.25</del> 0.26%)
			DFAX Allocation:
			AEC (4 <del>.19</del> 8.78%) / DPL
			( <del>5.889.27</del> %) / JCPL
			( <del>19.81</del> <u>19.92</u> %) / PECO
			(70.1262.03%)
	Replace Whitpain 230kV		<u> </u>
b0180	circuit breaker #165		PECO (100%)
	Replace Whitpain 230kV		
b0181	circuit breaker #J105		PECO (100%)
	Upgrade Plymouth		
	Meeting 230kV circuit		
b0182	breaker #125		PECO (100%)
	Install three 28.8Mvar		
	capacitors at Planebrook		
b0205	35kV substation		PECO (100%)
	Install 161Mvar capacitor		AEC (14.20%) / DPL
b0206	at Planebrook 230kV		(24.39%) / PECO (57.94%) /
	substation		PSEG (3.47%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

### **PECO Energy Company (cont.)**

Required T	Transmission Enhancements Annu	al 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 kV Center Point substation in PECO by tapping the Elroy – Whitpain 500 kV circuit		Load-Ratio Share     Allocation:  AEC (1.721.71%) / AEP     (14.1814.04%) / APS     (6.055.61%) / ATSI     (7.928.10%) / BGE     (4.234.36%) / ComEd     (13.2013.14%) / Dayton     (2.052.15%) / DEOK     (3.183.23%) / DL (1.681.73%)     / DPL (2.582.65%) / Dominion     (12.5613.03%) / EKPC     (1.941.77%) / JCPL     (3.823.84%) / ME (1.881.93%)     / NEPTUNE* (0.420.45%) /     OVEC (0.080.07%) / PECO     (5.315.29%) / PENELEC     (1.901.89%) / PEPCO     (3.903.82%) / PPL     (5.004.72%) / PSEG     (6.156.21%) / RE     (0.250.26%)†

	DFAX Allocation:
	<u>AEC (7.30%) / PECO</u>
	( <del>100</del> 92.70%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

	1	 1
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%)††

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>†</sup>Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

<sup>††</sup>Cost allocations associated with below 500 kV elements of the project

Required Tr	ansmission Enhancements A	nnual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share
			Allocation:
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> 14.04%) / APS
			( <del>6.05</del> 5.61%) / ATSI
		( <del>7.92</del> 8.10%) / BGE	
			(4.234.36%) / ComEd
		( <del>13.20</del> 13.14%) / Dayton	
			( <del>2.05</del> 2.15%) / DEOK
		( <del>3.18</del> 3.23%) / DL ( <del>1.68</del> 1.73%)	
	Add a new 500 kV		/ DPL (2.582.65%) / Dominion
	breaker at Whitpain		( <del>12.56</del> 13.03%) / EKPC
b0269.6	between #3 transformer		( <del>1.94</del> 1.77%) / JCPL
	and 5029 line		( <del>3.82</del> 3.84%) / ME ( <del>1.88</del> 1.93%)
	and 3027 inic		/ NEPTUNE* ( <del>0.42</del> 0.45%) /
			OVEC (0.080.07%) / PECO
			( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL
			( <del>5.00</del> 4.72%) / PSEG
		`	
!		1	(6.156.21%) / RE (0.250.26%) <b>DFAX Allocation:</b>
i			AEC (7.30%) / PECO
			(10092.70%)
	D - 11 N - 11 W-1- 220		( <del>100</del> <u>92.70</u> %)
b0269.7	Replace North Wales 230		DECO (1000()
	kV breaker #105		PECO (100%)
	Install a new 230 kV		
	Center Point substation in		
	PECO by tapping the		
b0269.10	North Wales – Perkiomen		
	230 kV circuit. Install a		
	new 500/230 kV Center		AEC (8.25%) / DPL (9.56%) /
	Point transformer		PECO (82.19%)††
	Install 161 MVAR		
b0280.1	capacitor at Warrington		
	230 kV substation		PECO 100%
	Install 161 MVAR		
b0280.2	capacitor at Bradford 230		
	kV substation		PECO 100%
	Install 28.8 MVAR		
b0280.3	capacitor at Warrington		
	34 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

	T 4 11 10 MANAD	 
1.0200.4	Install 18 MVAR	
b0280.4	capacitor at Waverly 13.8	
	kV substation	PECO 100%
		Load-Ratio Share
		Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI
		( <del>7.92</del> <u>8.10</u> %) / BGE
		( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> <u>2.15</u> %) / DEOK
		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %)
		/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	Install 600 MVAR	( <del>12.56</del> <u>13.03</u> %) / EKPC
b0287	Dynamic Reactive Device	( <del>1.94<u>1.77</u>%) / JCPL</del>
00287	in Whitpain 500 kV	( <del>3.82</del> <u>3.84</u> %) / ME ( <del>1.88</del> <u>1.93</u> %)
	vicinity	/ NEPTUNE* ( <del>0.42</del> <u>0.45</u> %) /
		OVEC ( <del>0.08</del> <u>0.07</u> %) / PECO
		( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> 3.82%) / PPL
		( <del>5.00</del> <u>4.72</u> %) / PSEG
		( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
		<b>DFAX Allocation:</b>
		AEC (4 <del>.19</del> 8.78%) / DPL
		( <del>5.88</del> <u>9.27</u> %) / JCPL
		( <del>19.81</del> <u>19.92</u> %) / PECO
		( <del>70.12</del> <u>62.03</u> %)
b0351	Reconductor Tunnel –	
00331	Grays Ferry 230 kV	PECO (100%)
1.0252	Reconductor Tunnel –	
b0352	Parrish 230 kV	PECO (100%)
	Install 2% reactors on	( )
b0353.1	both lines from Eddystone	
	– Llanerch 138 kV	PECO (100%)
	Install identical second	,
	230/138 kV transformer	
b0353.2	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>††</sup>Cost allocations associated with below 500 kV elements of the project

ransmission Ennancements A	illiuai Kevenue Kequilemeni	Responsible Customer(s)
Eddystone – Island Road		
equipment		PECO 100%
Reconductor Master –		
North Philadelphia 230		
kV line		PECO 100%
		JCPL (37.17%) / Neptune*
		(4.46%) / PSEG (54.14%) /
– Pleasant Valley 230 KV		RE (2.32%) / ECP** (1.91%)
Reconductor North		(1.91%)
230 kV circuit		PECO 100%
Replace Whitpain 230 kV		
breaker #245		PECO (100%)
Replace Whitpain 230 kV		
breaker #255		PECO (100%)
Spare Whitpain 500/230		
kV transformer		PECO (100%)
Spare Peach Bottom		
		PECO (100%)
<u> </u>		AEC (8.58%) / DPL
		(7.76%) / PECO (83.66%)
		AEC (8.58%) / DPL
		(7.76%) / PECO (83.66%)
		` ' '
		AEC (8.58%) / DPL (7.76%) PECO (83.66%)
		(7.70%)1120 (03.00%)
Hartman on the		
Warrington - Hartman		
230 kV circuit		PECO (100%)
Reconductor the Jarrett –		
Heaton 230 kV circuit		PECO (100%)
	Eddystone – Island Road Upgrade line terminal equipment Reconductor Master – North Philadelphia 230 kV line  Reconductor Buckingham – Pleasant Valley 230 kV  Reconductor North Philadelphia – Waneeta 230 kV circuit Replace Whitpain 230 kV breaker #245 Replace Whitpain 230 kV breaker #255 Spare Whitpain 500/230 kV transformer Spare Peach Bottom 500/230 kV transformer Reconductor the North Wales – Whitpain 230 kV circuit Reconductor the North Wales – Hartman 230 kV circuit Reconductor the Jarrett – Whitpain 230 kV circuit Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit Reconductor the Jarrett –	Eddystone – Island Road Upgrade line terminal equipment  Reconductor Master – North Philadelphia 230 kV line  Reconductor Buckingham – Pleasant Valley 230 kV  Reconductor North Philadelphia – Waneeta 230 kV circuit  Replace Whitpain 230 kV breaker #245  Replace Whitpain 230 kV breaker #255  Spare Whitpain 500/230 kV transformer  Spare Peach Bottom 500/230 kV transformer  Reconductor the North Wales – Whitpain 230 kV circuit  Reconductor the North Wales – Hartman 230 kV circuit  Reconductor the Jarrett – Whitpain 230 kV circuit  Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit  Reconductor the Jarrett –

<sup>\*</sup>Neptune Regional Transmission Partners, LLC
\*\*East Coast Power, L.L.C.

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
Rebuild Bryn Mawr –		
b0727 Plymouth Meeting 138		AEC (1.25%) / DPL
kV line		(3.11%) / PECO (95.64%)
Reconductor the line to		AEC (0.72%) / JCPL
provide a normal rating of	,	(17.36%) / NEPTUNE*
b0789 677 MVA and an		(1.70%) / PECO (44.47%) /
emergency rating of 827		ECP** (0.92%) / PSEG
MVA		(33.52%) / RE (1.31%)
Reconductor the Bradford		
– Planebrook 230 kV Ckt.		JCPL (17.30%) /
220-31 to provide a		NEPTUNE* (1.69%) /
b0790   220-31 to provide a normal rating of 677		PECO (45.09%) / ECP**
MVA and emergency		(0.93%) / PSEG (33.68%) /
rating of 827 MVA		RE (1.31%)
Replace Whitpain 230 kV		
b0829.1   Replace William 230 kV breaker '155'		PECO (100%)
Install 2 new 230 kV		
breakers at Planebrook		
b1073 (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%)
Replace Whitpain 230 kV		
b0829.3   Replace Wintpain 250 kV   breaker '175'		PECO (100%)
Replace Plymouth		
b0829.4 Meeting 230 kV breaker		
'225'		PECO (100%)
Replace Plymouth		
b0829.5 Meeting 230 kV breaker		
'335'		PECO (100%)
Move the connection		
b0841 points for the 2nd		
Plymouth Meeting		
230/138 kV XFMR		PECO (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\*East Coast Power, L.L.C.

	iliuai Keveliue Kequilellielli	responsible editionier(s)
Install a 2nd 230/138 kV XFMR and 35 MVAR		
		7777
		PECO (100%)
Replace Heaton 138 kV breaker '150'		PECO (100%)
Install a 75 MVAR CAP at Llanerch 138 kV bus		PECO (100%)
Move the connection point for the Llanerch 138/69 kV XFMR		PECO (100%)
Replace Richmond- Tacony 69 kV line		PECO (100%)
Replace station cable at Whitpain and Jarrett substations on the Jarrett - Whitpain 230 kV circuit		PECO (100%)
Replace Circuit breaker, Station Cable, CTs and Wave Trap at Eddistone 230 kV		PECO (100%)
Replace Circuit breaker, Station Cable, CTs Disconnect Switch and Wave Trap at Island Rd. 230 kV		PECO (100%)
Replace Breakers #115 and #125 at Printz 230 kV substation		PECO (100%)
Upgrade at Richmond 230 kV breaker '525'		PECO (100%)
Upgrade at Richmond 230 kV breaker '415'		PECO (100%)
Upgrade at Richmond 230 kV breaker '475'		PECO (100%)
Upgrade at Richmond 230 kV breaker '575'		PECO (100%)
	Install a 2nd 230/138 kV XFMR and 35 MVAR CAP at Heaton 138 kV bus Replace Heaton 138 kV breaker '150' Install a 75 MVAR CAP at Llanerch 138 kV bus Move the connection point for the Llanerch 138/69 kV XFMR Replace Richmond- Tacony 69 kV line Replace station cable at Whitpain and Jarrett substations on the Jarrett - Whitpain 230 kV circuit Replace Circuit breaker, Station Cable, CTs and Wave Trap at Eddistone 230 kV Replace Circuit breaker, Station Cable, CTs Disconnect Switch and Wave Trap at Island Rd. 230 kV Replace Breakers #115 and #125 at Printz 230 kV substation Upgrade at Richmond 230 kV breaker '525' Upgrade at Richmond 230 kV breaker '415' Upgrade at Richmond	Install a 2nd 230/138 kV XFMR and 35 MVAR CAP at Heaton 138 kV bus  Replace Heaton 138 kV breaker '150'  Install a 75 MVAR CAP at Llanerch 138 kV bus  Move the connection point for the Llanerch 138/69 kV XFMR  Replace Richmond- Tacony 69 kV line  Replace station cable at Whitpain and Jarrett substations on the Jarrett - Whitpain 230 kV circuit  Replace Circuit breaker, Station Cable, CTs and Wave Trap at Eddistone 230 kV  Replace Circuit breaker, Station Cable, CTs Disconnect Switch and Wave Trap at Island Rd. 230 kV  Replace Breakers #115 and #125 at Printz 230 kV substation Upgrade at Richmond 230 kV breaker '525' Upgrade at Richmond 230 kV breaker '415' Upgrade at Richmond 230 kV breaker '475' Upgrade at Richmond

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 11	ansmission Ennancements Ar	nnual 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC \*\*East Coast Power, L.L.C.

Required T	ransmission Enhancements A	innual 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%)

<sup>\*\*</sup>East Coast Power, L.L.C.

Required 11	ansmission Enhancements A	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 (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)†
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 (3.05%) / 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	•	BGE (4.54%) / DL (0.27%) / ME (1.04%) / HTP (0.03%) / PECO (88.08%) / PEPCO (2.79%) / PPL (3.25%)

terminal equipment	

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\*East Coast Power, L.L.C.

Required 11	ransmission Enhancements A	nnual Revenue Requirement	Responsible Customer(s)
	Install a second Waneeta		
b1717	230/138 kV transformer		HTP (0.04%) / PECO
	on a separate bus section		(99.96%)
	Reconductor the		
b1718	Crescentville - Foxchase		
	138 kV circuit		PECO (100%)
	Reconductor the		
b1719	Foxchase - Bluegrass 138		
	kV circuit		PECO (100%)
	Increase the effective		
	rating of the Eddystone		
b1720	230/138 kV transformer		
	by replacing a circuit		
	breaker at Eddystone		PECO (100%)
	Increase the rating of the		·
h1701	Waneeta - Tuna 138 kV		
b1721	circuit by replacing two		
	138 kV CTs at Waneeta		PECO (100%)
	Increase the normal		
	rating of the Cedarbrook		
	- Whitemarsh 69 kV		
b1722	circuit by changing the		
	CT ratio and replacing		
	station cable at		
	Whitemarsh 69 kV		PECO (100%)
	Install 39 MVAR		
b1768	capacitor at Cromby 138		
	kV bus		PECO (100%)
	A 1.1 - 21 220 1-V		PECO (69.62%) / JCPL
	Add a 3rd 230 kV		(6.02%) / ATSI (1.23%) /
b1900	transmission line between		PSEG (20.83%) / RE
01900	Chichester and Linwood		(0.83%) / NEPTUNE*
	substations and remove		(0.59%) / ECP** (0.45%) /
	the Linwood SPS		HTP (0.43%)
<b>L2140</b>	Install a 3rd Emilie		PECO (97.04%) / ECP**
b2140	230/138 kV transformer		(1.62%) / HTP (1.34%)
	Replace two sections of		
b2145	conductor inside		
	Richmond substation		PECO (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

<sup>\*\*\*</sup>Hudson Transmission Partners, LLC

#### **SCHEDULE 12 – APPENDIX**

# (9) PPL Electric Utilities Corporation

	Required T	ransmission Enhancements	Annual Revenue Requirem	nent Responsible Customer(s)
		Rebuild 12 miles of S.		
		Akron – Berks 230 kV to		
		double circuit, looping		
	b0074	Met Ed's S. Lebanon − S.		
		Reading line into Berks;		
		replacement of S. Reading		
		230 kV breaker 107252		PPL (100%)
				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> <u>14.04</u> %) / APS
				( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
				/ BGE (4 <del>.23</del> 4.36%) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				( <del>2.05</del> <u>2.15</u> %) / DEOK
				( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
				DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
		Replace wavetrap at		( <del>12.56</del> <u>13.03</u> %) / EKPC
		Hosensack 500kV		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	b0171.2	substation to increase		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		rating of Elroy -		( <del>0.42</del> <u>0.45</u> %) / OVEC
		Hosensack 500 kV		( <del>0.08</del> <u>0.07</u> %) / PECO ( <del>5.31</del> <u>5.29</u> %)
				/ PENELEC ( <del>1.90</del> <u>1.89</u> %) /
				PEPCO ( <del>3.90</del> <u>3.82</u> %) / PPL
				( <del>5.00</del> 4.72%) / PSEG ( <del>6.15</del> <u>6.21</u> %)
				/ RE ( <del>0.25</del> <u>0.26</u> %)
i				DFAX Allocation:
				AEC ( <del>4.19</del> <u>8.78</u> %) / DPL
				( <del>5.88</del> <u>9.27</u> %) / JCPL
				( <del>19.81</del> <u>19.92</u> %) / PECO
				( <del>70.12</del> <u>62.03</u> %)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
Required T	Replace wave trap at Alburtis 500kV substation	(6.) (6.) (1.) (1.) (1.) (0.)	Responsible Customer(s)  oad-Ratio Share Allocation:  AEC (1.721.71%) / AEP   (14.1814.04%) / APS   (0.55.61%) / ATSI (7.928.10%)  / BGE (4.234.36%) / ComEd   (13.2013.14%) / Dayton   (2.052.15%) / DEOK   (183.23%) / DL (1.681.73%) /  OPL (2.582.65%) / Dominion   (12.5613.03%) / EKPC   (941.77%) / JCPL (3.823.84%)  ME (1.881.93%) / NEPTUNE*   (0.420.45%) / OVEC   (0.420.45%) / OVEC   (0.420.45%) / PECO (5.315.29%)   / PENELEC (1.901.89%) /   PEPCO (3.903.82%) / PPL   (004.72%) / PSEG (6.156.21%)   / RE (0.250.26%)  DFAX Allocation:
b0284.2	Replace two wave traps at Juniata 500 kV – on the two Juniata – Airydale 500 kV	(6. (6. (7. (4. (4. (4. (4. (4. (4. (4. (4. (4. (4	AEC (4.498.09%) / JCPL (29.7232.99%) / NEPTUNE 4.975.38%) / PECO (9.91%) / PSEG (48.9051.49%) / RE (2.012.05%)  oad-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (941.77%) / JCPL (3.823.84%) ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (004.72%) / PSEG (6.156.21%) / RE (0.250.26%)

	DFAX Allocation:
	<u>AEC (5.58%) /</u> BGE
	( <del>21.26</del> 18.21%) / JCPL
	( <del>18.75</del> <u>18.24</u> %) / ME
	( <del>14.00</del> <u>11.07</u> %) / NEPTUNE
	( <del>2.11</del> 2.03%) / PECO
	( <del>18.78</del> <u>18.80</u> %) / PSEG
	(24.1125.07%) / RE(0.991.00%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Changes at Juniata 500 b0284.4 kV substation PPL (100%) Replace wavetrap at the b0293.1 Martins Creek 230 kV bus PPL (100%) Raise the operating temperature of the 2b0293.2 1590 ACSR to 140C for the Martins Creek -Portland 230 kV circuit PPL (100%) Spare Juniata 500/230 b0440 kV transformer PPL (100%) Build a new substation with two 150 MVA transformers between JCPL (4.55%) / Neptune\* Dauphin and (0.37%) / PECO (1.79%) / Hummelstown 230/69 b0468 PENELEC (0.33%) / PPL kV substations by (86.63%) / ECP\*\* (0.18%) / sectionalizing the PSEG (5.93%) / RE (0.22%) Middletown Junction -New Lebanon 230 kV line

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

<sup>\*\*\*</sup> Hudson Transmission Partners, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install 130 MVAR b0469 capacitor at West Shore 230 kV line PPL (100%) **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (<del>3.18</del>3.23%) / DL (<del>1.68</del>1.73%) / DPL (2.582.65%) / Dominion Build new 500 kV (<del>12.56</del>13.03%) / EKPC transmission facilities (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) from Susquehanna to b0487 / ME (<del>1.88</del>1.93%) / NEPTUNE\* Pennsylvania – New (<del>0.42</del>0.45%) / OVEC Jersey border at (0.080.07%) / PECO Bushkill (<del>5.31</del><u>5.29</u>%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)**DFAX Allocation:** JCPL (32.9333.79%)/ NEPTUNE (4.374.36%) / PSEG (<del>60.23</del>59.48%) / RE (<del>2.47</del>2.37%) Install Lackawanna 500/230 kV PENELEC (16.90%) / PPL transformer and b0487.1 (77.59%) / ECP\*\* (0.19%) / upgrade 230 kV PSEG (5.13%) / RE (0.19%) substation and switchyard Conastone - Otter Creek 230 kV -AEC (6.27%) / DPL (8.65%) / JCPL (14.54%) / ME (10.59%) / Reconductor Neptune\* (1.37%) / PECO approximately 17.2 b0500.1 miles of 795 kcmil (15.66%) / PPL (21.02%) / ECP\*\* (0.57%) / PSEG ACSR with new 795 kcmil ACSS operated (20.56%) / RE (0.77%) at 160 deg C

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

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

Required 1	Tansinission Emancements	Allituat Kevenue Kequiterile	the Responsible Customer(s)
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			(14.1814.04%) / APS
			(6.05 <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %) /
			BGE (4.234.36%) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			(2.052.15%) / DEOK (3.183.23%)
	I 11 250 MAYAR		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
1.0550	Install 250 MVAR		(2.582.65%) / Dominion
b0558	capacitor at Juniata 500		( <del>12.56</del> <u>13.03</u> %) / EKPC
	kV substation		(1.94 <u>1.77</u> %) / JCPL (3.82 <u>3.84</u> %) /
			ME (1.881.93%) / NEPTUNE*
			(0.42 <u>0.45</u> %) / OVEC (0.08 <u>0.07</u> %)
			/ PECO ( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			(3.903.82%) / PPL (5.004.72%) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
	Eldred – Pine Grove 69		
b0593	kV line Rebuild Part 2: 8		
	miles		PPL (100%)
	Rebuild Lackawanna –		
b0595	Edella 69 kV line to		
	double circuit		PPL (100%)
	Reconductor and rebuild		(
	Stanton – Providence 69		
10704	kV #1 and #2 lines with		
b0596	69 kV design;		
	approximately 8 miles		
	total		PPL (100%)
	Reconductor Suburban –		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
1.0507	Providence 69 kV #1 and		
b0597	resectionalize the		
	Suburban 69 kV lines		PPL (100%)
	Reconductor Suburban		. ,
b0598	Taps #1 and #2 for 69 kV		
30270	line portions		PPL (100%)
	r		11L (10070)

<sup>\*</sup> Neptune Regional Transmission System, LLC

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%)

Required	Transmission Enhancements	Annual Revenue Requiremen	t 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%)

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%)

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%)

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%)

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%)

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%)

Required T	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%)

Required T	ransmission 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%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlertown #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%)

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 (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)†
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

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%)

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%)

Required Transmission Enhancements		Annual Revenue Requiremen	nt 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)		Load-Ratio Share     Allocation:  AEC (1.721.71%) / AEP     (14.1814.04%) / APS     (6.055.61%) / ATSI     (7.928.10%) / BGE     (4.234.36%) / ComEd     (13.2013.14%) / Dayton     (2.052.15%) / DEOK     (3.183.23%) / DL (1.681.73%)     / DPL (2.582.65%) / Dominion     (12.5613.03%) / EKPC      (1.941.77%) / JCPL     (3.823.84%) / ME (1.881.93%)     / NEPTUNE* (0.420.45%) /     OVEC (0.080.07%) / PECO     (5.315.29%) / PENELEC     (1.901.89%) / PEPCO     (3.903.82%) / PPL     (5.004.72%) / PSEG     (6.156.21%) / RE (0.250.26%)     DFAX Allocation:     PPL (100%)
b2006.2	Construct a new 230/69 kV North Lancaster substation. The sub will be supplied from the SAKR-BERK 230kV Line		PPL (100%)

	Construct new 69/138 kV	
	transmission from North	
b2006.3	Lancaster 230/69 kV sub	
	to Brecknock and	
	Honeybrook areas	PPL (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

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

\*\*\* Hudson Transmi

Hudson Transmission LLC Partners,

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

		1	1
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%)

#### **SCHEDULE 12 – APPENDIX**

#### (10) Potomac Electric Power Company

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

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / Reconductor circuit ME (1.16%) / Neptune\* (0.25%) "23033" for Dickerson – b0367.2 / PECO (4.79%) / PEPCO Quince Orchard 230 kV (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP\*\* (0.08%) Install 0.5% reactor at AEC (1.02%) / BGE (25.42%) / Dickerson on the Pleasant DPL (2.97%) / ME (1.72%) / b0375 View – Dickerson 230 kV PECO (3.47%) / PEPCO circuit (65.40%) AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / Reconductor the JCPL (0.71%) / ME (2.48%) / b0467.1 Dickerson – Pleasant Neptune\* (0.06%) / PECO View 230 kV circuit (5.54%) / PEPCO (41.86%) / PPL (2.07%) Reconductor the four b0478 circuits from Burches Hill APS (1.68%) / BGE (1.83%) / PEPCO (96.49%) to Palmers Corner Replace existing 500/230 APS (5.67%) / BGE (29.68%) / b0496 kV transformer at Dominion (10.91%) / PEPCO **Brighton** (53.74%) Install third Burches Hill APS (3.54%) / BGE (7.31%) / b0499 500/230 kV transformer PEPCO (89.15%)

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required	Transmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		( <del>2.58</del> <u>2.65</u> %) / Dominion
	MAPP Project – install	( <del>12.56</del> <u>13.03</u> %) / EKPC
	new 500 kV transmission	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
	from Possum Point to	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
b0512	Calvert Cliffs and install a	( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
00312	DC line from Calvert	/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
	Cliffs to Vienna and a DC	( <del>1.90</del> <u>1.89</u> %) / PEPCO
	line from Calvert Cliffs to	( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
	Indian River	PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		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%)
		Load-Ratio Share Allocation:
		AEC ( <del>1.721.71</del> %) / AEP
		( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		(4.23 <u>4.36</u> %) / ComEd
	Advance n0772 (Replace	( <del>13.20</del> 13.14%) / Dayton
	Chalk Point 230 kV	( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
b0512.7	breaker (1A) with 80 kA	/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
	breaker)	(2.582.65%) / Dominion
	<i>'</i>	( <del>12.56</del> <u>13.03</u> %) / EKPC
		(1.94 <u>1.77</u> %) / JCPL (3.82 <u>3.84</u> %) /
		ME ( <del>1.88<u>1.93</u>%) / NEPTUNE*</del>
		( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%)
		/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
		(1.901.89%) / PEPCO
П	l	( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /

PSEG ( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
DFAX Allocation:
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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

	Required T	Transmission Enhancements	Annual Revenue Require	ment R	Responsible Customer(s)
				Load-Rat	io Share Allocation:
				AEC (-	<del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> <u>14.04</u>	%) / APS ( <del>6.05</del> <u>5.61</u> %)
				/ ATSI (	( <del>7.92</del> 8.10%) / BGE
					4.36%) / ComEd
				· · ·	13.14%) / Dayton
				` .	) / DEOK ( <del>3.18</del> 3.23%)
				`	L.681.73%) / DPL
				*	. <u>65</u> %) / Dominion
					5 <u>13.03</u> %) / EKPC
					)/JCPL ( <del>3.82</del> 3.84%)/
		Advance n0773 (Replace		· —	1.93%) / NEPTUNE*
		Chalk Point 230 kV			) / OVEC ( <del>0.08</del> 0.07%)
	b0512.8	breaker (1B) with 80 kA			31 <u>5.29</u> %) / PENELEC
		breaker)		,	1.89%) / PEPCO
				` -	5) / PPL ( <del>5.004.72</del> %) /
				· —	( <del>6.15</del> 6.21%) / RE
					( <del>0.25</del> 0.26%)
ı				`	AX Allocation:
					4%) / APS (0.33%) /
				`	4%) / DPL (14.69%) /
				`	0.30%) / JCPL (9.43%)
				`	.16%) / NEPTUNE
				`	/ PECO (10.52%) /
				, ,	.44%) / PPL (5.50%) /
				,	4.71%) / RE (0.54%)
				•	io Share Allocation:
1					1.721.71%) / AEP
					1%) / APS ( <del>6.05</del> 5.61%)
				`	( <del>7.92</del> 8.10%) / BGE
					4.36%) / ComEd
				,	13.14%) / Dayton
		Advance n0774 (Replace			) / DEOK ( <del>3.18</del> 3.23%)
		Chalk Point 230 kV			H.681.73%) / DPL
	b0512.9	breaker (2A) with 80 kA			.65%) / Dominion
	00312.7	breaker)			613.03%) / EKPC
		oreaker)		`	)/JCPL ( <del>3.82</del> 3.84%)/
				· —	1.93%) / NEPTUNE*
				, –	) / OVEC ( <del>0.08</del> 0.07%)
				`	315.29%) / PENELEC
				*	1.89%) / PEPCO
				•	5) / PPL ( <del>5.004.72</del> %) /
				,	,
			<u> </u>	PSEG	( <del>6.15</del> <u>6.21</u> %) / RE

	( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

	Required To	ransmission Enhancements	Annual Revenue Require	ment	Responsible Customer(s)
				Load-R	Ratio Share Allocation:
				AEC	C ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> 14.	.04%) / APS ( <del>6.05</del> <u>5.61</u> %)
			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%  / ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%  / DL (1.681.73%) / DPL  (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%)  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%  / PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO  (3.903.82%) / PPL (5.004.72%) /  PSEG (6.156.21%) / RE  (0.250.26%)  DFAX Allocation:		
				,	
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					,
		Advance n0775 (Replace			
		Chalk Point 230 kV		,	
	b0512.10	breaker (2B) with 80 kA		`	` /
		breaker)			, ,
		orealier)		`	
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		Advance n0776 (Replace	(13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23°	• • • • • • • • • • • • • • • • • • • •	
	b0512.11	Chalk Point 230 kV			,
	00312.11	breaker (2C) with 80 kA	/ ATSI (7-928.10%) / BGE		
		breaker)		,	
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1				PSE	.G ( <del>0.13</del> <u>6.21</u> %)/ КЕ

	( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

	Required To	ransmission Enhancements	Annual Revenue Requirer	ment Responsible Customer(s)
				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> <u>5.61</u> %)
				/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
				( <del>4.23</del> <u>4.36</u> %) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
				/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
				( <del>2.58</del> <u>2.65</u> %) / Dominion
				( <del>12.56</del> <u>13.03</u> %) / EKPC
				( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
		Advance n0777 (Replace		ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	b0512.12	Chalk Point 230 kV		( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
	00312.12	breaker (3A) with 80 kA		/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
		breaker)		( <del>1.90</del> 1.89%) / PEPCO
				( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /
				PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
				( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:
				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%)
,				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> <u>5.61</u> %)
				/ ATSI ( <del>7.92<u>8.10</u>%) / BGE</del>
				(4.234.36%) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
		Advance n0778 (Replace		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
	b0512.13	Chalk Point 230 kV		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
	00012.10	breaker (3B) with 80 kA		( <del>2.58</del> <u>2.65</u> %) / Dominion
		breaker)		( <del>12.56</del> <u>13.03</u> %) / EKPC
				( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
				ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
				( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
				/ PECO ( <del>5.315.29</del> %) / PENELEC
				( <del>1.90</del> 1.89%) / PEPCO
				( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /

	PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
	( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Tr	ransmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		( <del>4.23</del> 4.36%) / ComEd
		( <del>13.2013.14</del> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		( <del>2.58</del> 2.65%) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <u>3.82</u> <u>3.84</u> %) /
	Advance n0779 (Replace	ME ( <del>1.88</del> 1.93%) / NEPTUNE*
1.0512.14	Chalk Point 230 kV	( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%)
b0512.14	breaker (3C) with 80 kA	/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
	breaker)	( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		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%)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
	Advance n0780 (Replace	( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
b0512.15	Chalk Point 230 kV	/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
00312.13	breaker (4A) with 80 kA	( <del>2.58</del> <u>2.65</u> %) / Dominion
	breaker)	( <del>12.56</del> <u>13.03</u> %) / EKPC
		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
		ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
		/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /

	PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
	( <del>0.25</del> 0.26%)
I	(0.23 <u>0.20</u> 70)
	DFAX Allocation:
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
	Advance n0781 (Replace	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
b0512.16	Chalk Point 230 kV	( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%)
00312.10	breaker (4B) with 80 kA	/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
	breaker)	( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> 3.82%)/PPL( <del>5.00</del> 4.72%)/
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
	!	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%)
,		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		(4 <u>.234.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
b0512.17	Advance n0782 (Replace	( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
	Chalk Point 230 kV	/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
	breaker (5A) with 80 kA breaker)	( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
		( <del>1.941.77</del> %) / JCPL ( <del>3.823.84</del> %) /
		ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%)
		/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /

	PSEG ( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
	Advance n0783 (Replace	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
b0512.18	Chalk Point 230 kV	( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
00312.18	breaker (5B) with 80 kA	/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
	breaker)	( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		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%)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)	( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		(4.234.36%) / ComEd
b0512.19		( <del>13.2013.14</del> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
		( <del>1.941.77</del> %) / JCPL ( <del>3.823.84</del> %) /
		ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%)
		/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /

	PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
	( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
	Advance n0785 (Replace	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
1.0512.20	Chalk Point 230 kV	( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
b0512.20	breaker (6B) with 80 kA	/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
	breaker	( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.004.72</del> %) /
		PSEG ( <del>6.15</del> 6.21%) / RE
		(0.250.26%)
		DFAX Allocation:
		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%)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> <u>5.61</u> %)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
	Advance n0786 (Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker)	(4.23 <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
b0512.21		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		( <del>2.58</del> 2.65%) / Dominion
		( <del>12.56</del> 13.03%) / EKPC
		( <del>1.94</del> <u>1.77</u> %)/JCPL ( <del>3.823</del> .84%)/
		ME ( <del>1.881.93</del> %) / NEPTUNE*
		( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
		/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.903.82</del> %)/PPL ( <del>5.004.72</del> %)/
		(5.50 <u>5.02</u> 70)7112 (5.00 <u>1.72</u> 70)7

	PSEG ( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Load-Ratio Share Allocation:   AEC (4.721.71%) / AEP (14.1814.04%) / APS (6.055.61%)     ATSI (7.7928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%)     DL (4.681.73%) / DPL (2.582.65%) / Dominion (14.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /   ME (4.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.980.07%)     b0512.22   Advance n0787 (Replace   Chalk Point 230 kV   breaker (8A) with 80 kA   breaker)   DFAX Allocation:     AEC (3.94%) / APS (0.33%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PEPCO (3.903.82%) / PEC (6.156.21%) / RE (0.250.26%)     DFAX Allocation:   AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)     AEC (3.94%) / APS (0.33%) / ME (2.16%) / NEPTUNE (0.90%) / PEPCO (2.44%) / PPL (5.50%) / PEPCO (2.44%) / PPL (5.50%) / PEPCO (2.44%) / APS (6.055.61%)     ACC (4.234.36%) / ComEd (4.234.36%) / ComEd (4.234.36%) / ComEd (4.234.36%) / DEOK (3.183.23%) / DE		Required To	ransmission Enhancements	Annual Revenue Require	ment :	Responsible Customer(s)
Advance n0787 (Replace Chalk Point 230 kV					Load-Ra	tio Share Allocation:
ATSI (7-928_10%) / BGE					AEC	( <del>1.72</del> <u>1.71</u> %) / AEP
Advance n0787 (Replace Chalk Point 230 kV breaker)   Chalk Point 230 kV					( <del>14.18</del> <u>14.0</u>	4%) / APS ( <del>6.05</del> <u>5.61</u> %)
Advance n0787 (Replace Chalk Point 230 kV breaker)   Chalk Point 230 kV					/ ATSI	( <del>7.92</del> 8.10%)/BGE
Hart   Continue   Co						
Advance n0787 (Replace Chalk Point 230 kV breaker)					,	
Advance n0787 (Replace Chalk Point 230 kV breaker)					`	
Advance n0787 (Replace Chalk Point 230 kV breaker)					`	, , ,
Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)   Chalk Point 230 kV breaker (8A) with 80 kA breaker)   Chalk Point 230 kV breaker (8A) with 80 kA breaker)   Chalk Point 230 kV breaker (8A) with 80 kA breaker)   PECO (5.3+5.29%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)   PFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)   ME (1.6%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)   Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.181.40%) / APS (6.055.61%)   Advance n0788 (Replace Chalk Point 230 kV   DL (1.681.73%) / DEOK (3.183.23%)   DL (1.681.73%) / DPL (1.681.73%) / DPL   DEC (1.681.73%) / DEC						,
Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)  Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)  Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)  Advance n0787 (Replace (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PECO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)  DFAX Allocation:  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%)  Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL						
Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)  Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)  Application:  Appl						
Chalk Point 230 kV breaker (8A) with 80 kA breaker)  Chalk Point 230 kV breaker (8A) with 80 kA breaker)  (0.420.45%)/OVEC (0.080.07%)  / PECO (5.345.29%)/ PENELEC (1.901.89%)/ PEPCO (3.903.82%)/ PPL (5.004.72%)/  PSEG (6.156.21%)/ RE (0.250.26%)  DFAX Allocation:  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%)  Load-Ratio Share Allocation:  AEC (1.721.71%)/ AEP (14.1814.04%)/ APS (6.055.61%)  / ATSI (7.928.10%)/ BGE (4.234.36%)/ ComEd (13.2013.14%)/ Dayton (2.052.15%)/ DEOK (3.183.23%)  Advance n0788 (Replace Chalk Point 230 kV  / DL (1.681.73%)/ DPL			Advance n0787 (Replace			
breaker (8A) with 80 kA breaker)    PECO (\$\frac{5.315.29}{8}\) / PENELEC   (\frac{1.901.89}{8}\) / PEPCO   (\frac{3.903.82}{8.90}\) / PPL (\frac{5.004.72}{9}\) /   PSEG (\$\frac{6.156.21}{8}\) / RE   (\frac{0.250.26}{9}\)   DFAX Allocation:   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%) /   PEPCO (2.44%) / PPL (5.50%) /   PSEG (14.71%) / AEP   (14.1814.04%) / APS (6.055.61%)   / ATSI (7.928.10%) / BGE   (4.234.36%) / ComEd   (13.2013.14%) / Dayton   Advance n0788 (Replace   Chalk Point 230 kV   DL (1.681.73%) / DPL			` .		*	
(1.901.89%) / PEPCO   (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE   (0.250.26%)     DFAX Allocation:   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%)     Load-Ratio Share Allocation:   AEC (1.721.71%) / AEP   (14.1814.04%) / APS (6.055.61%)   / ATSI (7.928.10%) / BGE   (4.234.36%) / ComEd   (13.2013.14%) / Dayton   Advance n0788 (Replace Chalk Point 230 kV   / DL (1.681.73%) / DPL		b0512.22			`	, , ,
(3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE			, ,		•	<del></del> ,
PSEG (6.156.21%) / RE			,		`	
DFAX Allocation:   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%)     Load-Ratio Share Allocation:   AEC (1.721.71%) / AEP     (14.1814.04%) / APS (6.055.61%)     / ATSI (7.928.10%) / BGE     (4.234.36%) / ComEd     (13.2013.14%) / Dayton     Advance n0788 (Replace     Chalk Point 230 kV   DL (1.681.73%) / DPL						,
DFAX Allocation:  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%)  Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%)  / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton  Advance n0788 (Replace Chalk Point 230 kV  / DL (1.681.73%) / DPL						`
AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)					DF	
BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)						
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%)  Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%)  / ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  Advance n0788 (Replace  Chalk Point 230 kV  DL (1.681.73%) / DPL					`	, , , ,
/ ME (2.16%) / NEPTUNE (0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)  Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton Advance n0788 (Replace Chalk Point 230 kV  / DL (1.681.73%) / DPL					`	,
(0.90%) / PECO (10.52%) / PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)  Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton Advance n0788 (Replace Chalk Point 230 kV / DL (1.681.73%) / DPL						` '
PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / RE (0.54%)  Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%)  / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton  Advance n0788 (Replace Chalk Point 230 kV  PEPCO (2.44%) / PPL (5.50%) / PSEG (14.71%) / DEOK (6.054%)  Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%)  / ATSI (7.928.10%) / BGE (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%)  / DL (1.681.73%) / DPL					,	*
PSEG (14.71%) / RE (0.54%)  Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%)  / ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  Advance n0788 (Replace  Chalk Point 230 kV  PSEG (14.71%) / RE (0.54%)  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%)  / ATSI (7.928.10%) / BGE  (2.052.15%) / DEOK (3.183.23%)  / DL (1.681.73%) / DPL					•	
Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%)					,	, , , , , , , , , , , , , , , , , , , ,
(14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) Chalk Point 230 kV (14.1814.04%) / APS (6.055.61%) (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%)					,	, , , , , , , , , , , , , , , , , , , ,
(14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) Chalk Point 230 kV (14.1814.04%) / APS (6.055.61%) (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%)	Ì				AEC	( <del>1.72</del> 1.71%) / AEP
/ ATSI (7.92 <u>8.10</u> %) / BGE (4.23 <u>4.36</u> %) / ComEd (13.20 <u>13.14</u> %) / Dayton Advance n0788 (Replace Chalk Point 230 kV (2.052.15%) / DEOK (3.183.23%) / DL (1.68 <u>1.73</u> %) / DPL						,
(4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) Chalk Point 230 kV / DL (1.681.73%) / DPL						
Advance n0788 (Replace   (13.2013.14%) / Dayton   (2.052.15%) / DEOK (3.183.23%)   / DL (1.681.73%) / DPL						,
Advance n0788 (Replace Chalk Point 230 kV (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL			` *		,	
Chalk Point 230 kV / DL ( <del>1.68</del> <u>1.73</u> %) / DPL						
					• —	,
b0512.23   breaker (8B) with 80 kA   (2.582.65%) / Dominion		b0512.23				
					•	
( <del>1.941.77</del> %)/JCPL ( <del>3.823.84</del> %)/					•	
ME ( <del>1.88</del> 1.93%) / NEPTUNE*					• —	,
( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%)					•	
/ PECO ( <del>5.315.29</del> %) / PENELEC						, , ,
( <del>1.90</del> 1.89%) / PEPCO					•	
( <del>3.90</del> 3.82%) / PPL ( <del>5.004.72</del> %) /					`	
PSEG ( <del>6.156.21</del> %) / RE						, ,

	( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
	Advance n0789 (Replace	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
	Chalk Point 230 kV	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
b0512.24	breaker (7A) with 80 kA	( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
00312.24	breaker)	/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
	oreaker)	( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		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%)
		Load-Ratio Share Allocation:
	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)	AEC ( <del>1.721.71</del> %) / AEP
		( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		(4.23 <u>4.36</u> %) / ComEd
		( <del>13.20</del> 13.14%) / Dayton
b0512.25		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
		(1.94 <u>1.77</u> %) / JCPL (3.82 <u>3.84</u> %) /
		ME ( <del>1.88<u>1.93</u>%) / NEPTUNE*</del>
		( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%)
		/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
П		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /

	PSEG ( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	Transmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
	Advance n0791 (Replace	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
	Chalk Point 230 Kv	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
b0512.26	breaker (4C) with 80 kA	( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
00312.20	breaker)	/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
	breaker)	( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		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%)
		Load-Ratio Share Allocation:
	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)	AEC ( <del>1.72</del> 1.71%) / AEP
		( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%)
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
		(4.23 <u>4.36</u> %) / ComEd
		( <del>13.20</del> 13.14%) / Dayton
b0512.27		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
		(1.94 <u>1.77</u> %) / JCPL (3.82 <u>3.84</u> %) /
		ME ( <del>1.88<u>1.93</u>%) / NEPTUNE*</del>
		( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%)
		/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /

	PSEG ( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)			
		Load-Ratio Share Allocation:	
		AEC ( <del>1.72</del> 1.71%) / AEP	
		( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> <u>5.61</u> %)	
		/ ATSI ( <del>7.92</del> 8.10%) / BGE	
		( <del>4.23</del> 4.36%) / ComEd	
		( <del>13.20</del> 13.14%) / Dayton	
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)	
		/ DL ( <del>1.68</del> 1.73%) / DPL	
		( <del>2.58</del> 2.65%) / Dominion	
		( <del>12.56</del> 13.03%) / EKPC	
		( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%) /	
	Advance n0793 (Replace	ME ( <del>1.88</del> 1.93%) / NEPTUNE*	
	Chalk Point 230 Kv	( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%)	
b0512.28	B breaker (6C) with 80 kA	/ PECO ( <del>5.31</del> 5.29%) / PENELEC	
	breaker)	(1.901.89%) / PEPCO	
		( <del>3.90</del> 3.82%)/PPL ( <del>5.004</del> .72%)/	
		PSEG (6.156.21%) / RE	
		`	
		( <del>0.25</del> <u>0.26</u> %)	
		DFAX Allocation:	
		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%)	
1	Advance n0794 (Replace Chalk Point 230 Kv breaker (7C) with 80 kA breaker)	Load-Ratio Share Allocation:	
		AEC ( <del>1.72</del> 1.71%) / AEP	
		( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%)	
		/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE	
		(4.23 <u>4.36</u> %) / ComEd	
		( <del>13.20</del> <u>13.14</u> %) / Dayton	
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)	
b0512.29		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL	
		( <del>2.58</del> 2.65%) / Dominion	
		( <del>12.56</del> <u>13.03</u> %) / EKPC	
		( <del>1.94<u>1.77</u>%)/JCPL (<u>3.823.84</u>%)/</del>	
		ME ( <del>1.88</del> 1.93%) / NEPTUNE*	
		( <del>0.42<u>0.45</u>%) / OVEC (<del>0.08</del><u>0.07</u>%)</del>	
		/ PECO ( <del>5.31</del> 5.29%) / PENELEC	
		( <del>1.90</del> 1.89%) / PEPCO	
		( <del>3.90</del> 3.82%)/PPL ( <del>5.00</del> 4.72%)/	
11	Ī	(3.70 <u>3.02</u> 70)/1112 (3.00 <u>1.72</u> 70)/	

	PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
	( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

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	PEPCO (100%)		

230	0 kV breakers	

required		Annual Revenue Requireme	the Responsible Cusiomer(s)
	Expand Benning 230 kV		
b0701	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%)
	Add a second 50 MVAR		
b0702	230 kV shunt reactor at		
00702	the Benning 230 kV		
	substation		PEPCO (100%)
b0720	Upgrade terminal		
00720	equipment on both lines		PEPCO (100%)
	Upgrade Oak Grove –		
b0721	Ritchie 23061 230 kV		
	line		PEPCO (100%)
	Upgrade Oak Grove –		
b0722	Ritchie 23058 230 kV		
	line		PEPCO (100%)
	Upgrade Oak Grove –		
b0723	Ritchie 23059 230 kV		
	line		PEPCO (100%)
	Upgrade Oak Grove –		
b0724	Ritchie 23060 230 kV		
	line		PEPCO (100%)
	Add slow oil circulation		
	to the four Bells Mill		
	Road – Bethesda 138 kV		
b0730	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

Required	Transmission Enhancements	Annual Revenue Requireme	ent Responsible Customer(s)
	Implement an SPS to		
	automatically shed load		
	on the 34 kV Bells Mill		
	Road bus for this N-2		
b0731	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%)
	Upgrade circuit for 3,000		AEC (0.73%) / BGE (31.05%) /
b0746	amps using the ACCR		DPL (1.45%) / PECO (2.46%) /
	amps using the ACCK		PEPCO (62.88%) / PPL (1.43%)
	Upgrade terminal		
	equipment on both lines:		
b0747	Quince Orchard - Bells		
	Mill 230 kV (030) and		
	(028)		PEPCO (100%)
	Advance n0259 (Replace		
b0802	Dickerson Station H		
	Circuit Breaker 412A)		PEPCO (100%)
	Advance n0260 (Replace		
b0803	Dickerson Station H		
	Circuit Breaker 42A)		PEPCO (100%)
	Advance n0261 (Replace		
b0804	Dickerson Station H		
	Circuit Breaker 42C)		PEPCO (100%)
	Advance n0262 (Replace		
b0805	Dickerson Station H		
	Circuit Breaker 43A)		PEPCO (100%)
	Advance n0264 (Replace		
b0806	Dickerson Station H		
	Circuit Breaker 44A)		PEPCO (100%)

\* Neptune Regional Transmission System, LLC

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

Required '	Transmission Enhancements	Annual Revenue Requirement	nt Responsible Customer(s)
	Replace Chalk Point 230		
b0856	kV breaker (5B) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		
b0857	kV breaker (6A) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		, ,
b0858	kV breaker (6B) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		
b0859	kV breaker (7B) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		
b0860	kV breaker (8A) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		,
b0861	kV breaker (8B) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		· · · · · · · · · · · · · · · · · · ·
b0862	kV breaker (7A) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		,
b0863	kV breaker (1C) with 80		
	kA breaker		PEPCO (100%)
1.110.4	Replace Burtonsville 230		
b1104	kV breaker '1C'		PEPCO (100%)
L1105	Replace Burtonsville 230		
b1105	kV breaker '2C'		PEPCO (100%)
b1106	Replace Burtonsville 230		
01100	kV breaker '3C'		PEPCO (100%)
h1107	Replace Burtonsville 230		
b1107	kV breaker '4C'		PEPCO (100%)
	Convert the 138 kV line		
	from Buzzard 138 -		
	Ritchie 851 to a 230 kV		
b1125	line and Remove 230/138		
	kV Transformer at Ritchie		
	and install a spare 230/138		
	kV transformer at Buzzard		
	Pt	Al	PS (4.74%) / PEPCO (95.26%)
	Upgrade the 230 kV line		
b1126	from Buzzard 016 –		
	Ritchie 059		PS (4.74%) / PEPCO (95.26%)

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Reconductor the Oak Grove - Aquasco 230 kV '23062' circuit and b1597 upgrade terminal equipments at Oak Grove AEC (1.44%) / BGE (48.60%) / and Aquasco 230 kV DPL (2.52%) / PECO (5.00%) / PEPCO (42.44%) substations Reconductor feeder 23032 BGE (33.05%) / DPL (1.38%) / b2008 PECO (1.35%) / PEPCO and 23034 to high temp. conductor (10 miles) (64.22%)/Reconductor the Morgantown - V3-017 230 kV '23086' circuit and b2136 replace terminal equipments at Morgantown PEPCO (100%) Reconductor the Morgantown - Talbert 230 kV '23085' circuit and b2137 replace terminal equipment at Morgantown PEPCO (100%) Replace terminal b2138 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) Convert the Bergen-Leonia 138 Kv circuit to b0025 230 kV circuit. PSEG (100%) Add 150 MVAR capacitor b0090 at Camden 230 kV PSEG (100%) Add 150 MVAR capacitor b0121 at Aldene 230 kV PSEG (100%) Bypass the Essex 138 kV b0122 series reactors PSEG (100%) Add Special Protection Scheme at Bridgewater to automatically open 230 kV breaker for outage of Branchburg – Deans 500 kV and Deans 500/230 kV b0125 #1 transformer PSEG (100%) Replace wavetrap Branchburg - Flagtown 230 kV b0126 PSEG (100%) Replace terminal equipment to increase Brunswick - Adams -Bennetts Lane 230 kV to b0127 conductor rating PSEG (100%) Replace wavetrap Flagtown - Somerville b0129 230 kV PSEG (100%) Replace all derated Branchburg 500/230 kV AEC (1.36%) / JCPL (47.76%) / b0130 transformers PSEG (50.88%) Upgrade or Retension **PSEG** portion Kittatinny – Newton 230 JCPL (51.11%) / PSEG **kVcircuit** (45.96%) / RE (2.93%) b0134

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.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Build new Essex - Aldene 230 kV cable connected through a phase angle PSEG (21.78%) / JCPL b0145 regulator at Essex (73.45%) /RE (4.77%) Add 100MVAR capacitor PSEG (100%) at West Orange 138kV substation b0157 Close the Sunnymeade PSEG (100%) "C" and "F" bus tie b0158 Make the Bayonne reactor PSEG (100%) b0159 permanent installation Relocate the X-2250 PSEG (100%) circuit from Hudson 1-6 b0160 bus to Hudson 7-12 bus 230/138kV PSEG (99.80%) / RE (0.20%) Install transformer at Metuchen b0161 substation Upgrade the Edison – PSEG (100%) Meadow Rd 138kV "Q" b0162 circuit Upgrade the Edison – PSEG (100%) Meadow Rd 138kV "R" b0163 circuit Build a new 230 kV section from Branchburg Flagtown and move the b0169 AEC (1.72%) / JCPL (25.94%) Flagtown – Somerville 230 kV circuit to the new / Neptune\* (10.62%) / PSEG (59.59%) / ECP\*\* (2.13%) section Reconductor the JCLP (42.95%) / Neptune\* Flagtown-Somervilleb0170 Bridgewater (17.90%) / PSEG (38.36%) RE 230 kV

(0.79%)

circuit with 1590 ACSS

\* Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%)/ DPL (2.582.65%) / Dominion (<del>12.56</del>13.03%) / EKPC (<del>1.94</del>1.77%) / JCPL Replace wave trap at (3.823.84%) / ME (1.881.93%) b0172.2 Branchburg 500kV / NEPTUNE\* (<del>0.42</del>0.45%) / substation OVEC (0.080.07%) / PECO (<del>5.31</del>5.29%) / PENELEC (1.901.89%) / PEPCO (<del>3.90</del>3.82%) / PPL (<del>5.00</del>4.72%) / PSEG (<del>6.15</del><u>6.21</u>%) / RE (0.250.26%)**DFAX Allocation:** AEC (4.498.09%) / JCPL (<del>29.72</del>32.99%) / NEPTUNE (4.975.38%) / PECO (9.91%) / PSEG (48.9051.49%) / RE (2.012.05%)PSEG (100%) Replace Hudson 230kV b0184 circuit breakers #1-2 PSEG (100%) Replace Deans 230kV b0185 circuit breakers #9-10 PSEG (100%) Replace Essex 230kV b0186 circuit breaker #5-6 Install 230/138 kV PENELEC (16.52%) / PSEG transformer at Bergen (80.29%) / RE (3.19%) b1082 substation

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission 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	(6.055) (6.055) (80) (1) (1) (3.182) DPL (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	I-Ratio Share Allocation: EC (1.721.71%) / AEP (14.1814.04%) / APS (5.61%) / ATSI (7.928.10%) GE (4.234.36%) / ComEd (3.2013.14%) / Dayton (2.052.15%) / DEOK (3.23%) / DL (1.681.73%) / (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.77%) / JCPL (3.823.84%) (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.77%) / PECO (5.315.29%) ENELEC (1.901.89%) / PCO (3.903.82%) / PPL (1.72%) / PSEG (6.156.21%) / RE (0.250.26%)  DFAX Allocation: EC (4.498.09%) / JCPL (7232.99%) / NEPTUNE (5.38%) / PECO (9.91%) / EG (48.9051.49%) / RE (2.012.05%)

	Reconductor the PSEG	
	portion of Buckingham -	
b0358	Pleasant Valley 230 kV,	
	replace wave trap and	
	metering transformer	PSEG (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\*East Coast Power, L.L.C.

Required T	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%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace W. Orange 138 b0401.8 kV breaker 132-4 PSEG (100%) 4<sup>th</sup> Install 500/230 kV AEC (47.01%) / JCPL (7.04%) / Neptune\* (0.28%) / PECO transformer at New b0411 Freedom (23.36%) / PSEG (22.31%) Reconductor Readington (2555)Branchburg b0423 (4962) 230 kV circuit w/1590 ACSS PSEG (100%) Replace Readington wavetrap on Readington b0424 (2555) - Roseland (5017) 230 kV circuit PSEG (100%) Reconductor Linden (4996) - Tosco (5190) 230 kV circuit w/1590 ACSS (Assumes operating at 220 b0425 degrees C) PSEG (100%) Reconductor Tosco (5190) - G22 MTX5 (90220) 230 kV circuit w/1590 ACSS (Assumes operation at 220 b0426 degrees C) PSEG (100%) Reconductor Athenia (4954) – Saddle Brook (5020) 230 kV circuit river b0427 section PSEG (100%) Replace Roseland wavetrap Roseland on (5019) - West Caldwell b0428 "G" (5089) 138 kV circuit PSEG (100%) Reconductor **Kittatinny** (2553) – Newton (2535)JCPL (41.91%) / Neptune\* b0429 230 kV circuit w/1590 (3.59%) / PSEG (50.59%) / RE (2.23%) / ECP\*\* (1.68%) **ACSS** Spare Deans 500/230 kV transformer b0439 PSEG (100%) Upgrade Bayway 138 kV breaker #2-3 b0446.1 PSEG (100%) Upgrade Bayway 138 kV breaker #3-4 b0446.2 PSEG (100%) Upgrade Bayway 138 kV breaker #6-7 b0446.3 PSEG (100%)

Required T	ransmission Enhancements	Annual Revenue Requirem	nent Responsible Customer(s)
	Upgrade the breaker		
	associated with TX 132-		
b0446.4	5 on Linden 138 kV		PSEG (100%)
	Install 138 kV breaker		
b0470	at Roseland and close		
00170	the Roseland 138 kV		
	buses		PSEG (100%)
	Replace the wave traps		
	at both Lawrence and		
b0471	Pleasant Valley on the		
	Lawrence – Pleasant		
	Vallen 230 kV circuit		PSEG (100%)
	Increase the emergency		
	rating of Saddle Brook –		
b0472	Athenia 230 kV by 25%		
	by adding forced		ECP (2.06%) / PSEG (94.41%) /
	cooling		RE (3.53%)
	Move the 150 MVAR		
	mobile capacitor from		
b0473	Aldene 230 kV to		
	Lawrence 230 kV		
	substation		PSEG (100%)
			<b>Load-Ratio Share Allocation:</b>
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23<u>4.36</u>%) / ComEd</del>
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
	Build new 500 kV		DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	transmission facilities		( <del>12.56</del> <u>13.03</u> %) / EKPC
b0489	from Pennsylvania –		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	New Jersey border at		/ ME ( <del>1.88<u></u>1.93</del> %) / NEPTUNE*
	Bushkill to Roseland		( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO ( <del>5.31</del> <u>5.29</u> %)
			/ PENELEC ( <del>1.90</del> <u>1.89</u> %) /
			PEPCO ( <del>3.90</del> <u>3.82</u> %) / PPL
			( <del>5.00</del> 4.72%) / PSEG ( <del>6.15</del> <u>6.21</u> %)
			/ RE ( <del>0.25</del> <u>0.26</u> %)†
			<b>DFAX Allocation:</b>
			JCPL ( <del>39.21</del> <u>39.48</u> %) /
			NEPTUNE (4.054.03%) / PSEG

	( <del>54.50</del> 54.33%) / RE ( <del>2.24</del> 2.16%)
	(0 110 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

<sup>\*</sup> Neptune Regional Transmission System, LLC \*\*East Coast Power, L.LC.

<sup>†</sup>Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

<sup>††</sup>Cost allocations associated with below 500 kV elements of the project

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Athenia 230 kV b489.1 breaker 31H PSEG (100%) Replace Bergen 230 kV b489.2 breaker 10H PSEG (100%) Replace Saddlebrook 230 b489.3 kV breaker 21P PSEG (100%) AEC (5.09%) / ComEd (0.29%) / Dayton (0.03%) / DPL (1.76%) Roseland Install two / JCPL (32.73%) / Neptune\* 500/230 kV transformers b0489.4 (6.32%) / PECO (10.04%) / as part of the Susquehanna PENELEC (0.56%) / ECP\*\* - Roseland 500 kV project (0.95%) / PSEG (40.71%) / RE (1.52%)†† **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (<del>12.56</del>13.03%) / EKPC (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) Replace Roseland 230 kV b0489.5 / ME (<del>1.88</del>1.93%) / NEPTUNE\* breaker '42H' with 80 kA (<del>0.42</del>0.45%) / OVEC (0.080.07%) / PECO (<del>5.31</del>5.29%) / PENELEC (<del>1.90</del>1.89%) / PEPCO (<del>3.90</del>3.82%) / PPL (<del>5.00</del>4.72</del>%) / PSEG (6.156.21%) / RE (0.250.26%)**DFAX Allocation:** JCPL (<del>39.21</del><u>39.48</u>%) / NEPTUNE (4.054.03%) / PSEG (<del>54.5054.33</del>%) / RE (<del>2.24</del><u>2.16</u>%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required T	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
b0489.6	Replace Roseland 230 kV breaker '51H' with 80 kA	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS  (6.055.61%) / ATSI (7.928.10%)  / BGE (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%) /  DPL (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%)  / ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC  (0.080.07%) / PECO  (5.315.29%) / PENELEC  (1.901.89%) / PEPCO  (3.903.82%) / PPL (5.004.72%) /  PSEG (6.156.21%) / RE  (0.250.26%)  DFAX Allocation:  JCPL (39.2139.48%) /  NEPTUNE (4.054.03%) / PSEG  (54.5054.33%) / RE (2.242.16%)
b0489.7	Replace Roseland 230 kV breaker '71H' with 80 kA	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS  (6.055.61%) / ATSI (7.928.10%)  / BGE (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%) /  DPL (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%)  / ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC  (0.080.07%) / PECO  (5.315.29%) / PENELEC  (1.901.89%) / PEPCO  (3.903.82%) / PPL (5.004.72%) /  PSEG (6.156.21%) / RE  (0.250.26%)

		DFAX Allocation:
		JCPL ( <del>39.21</del> <u>39.48</u> %) /
		NEPTUNE (4.054.03%) / PSEG
		( <del>54.50</del> <u>54.33</u> %) / RE ( <del>2.24</del> <u>2.16</u> %)

<sup>\*</sup> Neptune Regional Transmission System, LLC

	Required T	ransmission Enhancements	Annual Revenue Requirem	nent Responsible Customer(s)
				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18<u>14.04</u>%)</del> / APS
				( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
				/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				( <del>2.05</del> <u>2.15</u> %) / DEOK
				( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
				DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
				( <del>12.56</del> <u>13.03</u> %) / EKPC
		Replace Roseland 230 kV		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	b0489.8	breaker '31H' with 80 kA		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		STUMEN STIT WILL GO INT		( <del>0.42</del> <u>0.45</u> %) / OVEC
				( <del>0.08</del> <u>0.07</u> %) / PECO
				( <del>5.31<u>5.29</u>%)</del> / PENELEC
				( <del>1.90</del> 1.89%) / PEPCO
				(3.90 <u>3.82</u> %) / PPL (5.00 <u>4.72</u> %) /
				PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
				( <del>0.25</del> <u>0.26</u> %)
ı				DFAX Allocation:
				JCPL ( <del>39.21<u>39.48</u>%) /</del>
				NEPTUNE (4.05 <u>4.03</u> %) / PSEG
				( <del>54.50</del> <u>54.33</u> %) / RE ( <del>2.24</del> <u>2.16</u> %)
	* Neptune Regional Transmission System, LLC			

Re	equired Tra	nsmission Enhancements	Annual Revenue Requirem	ent Responsible Customer(s)
				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> <u>14.04</u> %) / APS
				( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
				/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				( <del>2.05</del> <u>2.15</u> %) / DEOK
				( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
				DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
				( <del>12.56</del> <u>13.03</u> %) / EKPC
		Replace Roseland 230		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
b	0489.9	kV breaker '11H' with		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		80 kA		( <del>0.42</del> 0.45%) / OVEC
				( <del>0.08</del> <u>0.07</u> %) / PECO
				( <del>5.31<u>5.29</u>%</del> ) / PENELEC
				(1.901.89%) / PEPCO
				(3.903.82%) / PPL (5.004.72%) /
				PSEG (6.156.21%) / RE
				( <del>0.25</del> <u>0.26</u> %)
1				DFAX Allocation:
				JCPL (39.2139.48%) /
				NEPTUNE (4.054.03%) / PSEG
				(54.5054.33%) / RE (2.242.16%) Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> 1.71%) / AEP
				( <del>14.18</del> 14.04%) / APS
				( <del>6.05</del> 5.61%) / ATSI ( <del>7.92</del> 8.10%)
				/ BGE ( <del>4.23</del> 4.36%) / ComEd
				( <del>13.20</del> 13.14%) / Dayton
				( <del>2.05</del> 2.15%) / DEOK
				( <del>3.183.23</del> %) / DL ( <del>1.68</del> 1.73%) /
				DPL (2.582.65%) / Dominion
	0400 10	Replace Roseland 230		( <del>12.56</del> 13.03%) / EKPC
	0489.10	kV breaker '21H'		( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%)
				/ ME ( <del>1.88</del> 1.93%) / NEPTUNE*
				( <del>0.42</del> 0.45%) / OVEC
				( <del>0.08</del> <u>0.07</u> %) / PECO
				( <del>5.31</del> <u>5.29</u> %) / PENELEC
				( <del>1.90</del> 1.89%) / PEPCO
				( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /
				PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
				( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:

	JCPL ( <del>39.21</del> <u>39.48</u> %) /
	NEPTUNE ( <del>4.05</del> 4.03%) / PSEG
	( <del>54.5054.33</del> %) / RE ( <del>2.24</del> 2.16%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

	Required Tra	ansmission Enhancements	Annual Revenue Requirement Responsible Customer(s	s)
			Load-Ratio Share Allocation	ı:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP	
			( <del>14.18</del> <u>14.04</u> %) / APS	
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %	6)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd	
			( <del>13.20</del> <u>13.14</u> %) / Dayton	
			( <del>2.05</del> <u>2.15</u> %) / DEOK	
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %)	
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion	Ĺ
			( <del>12.56</del> <u>13.03</u> %) / EKPC	, \
	1040044	Replace Roseland 230	( <del>1.94<u>1.77</u>%) / JCPL (<u>3.82<u>3.84</u>%)</u></del>	-
	b0489.11	kV breaker '32H'	/ ME ( <del>1.88<u>1.93</u>%) / NEPTUNE</del>	5*
			( <del>0.42</del> <u>0.45</u> %) / OVEC	
			( <del>0.08</del> 0.07%) / PECO	
			( <del>5.315.29</del> %) / PENELEC	
			( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%) / PPL ( <del>5.004</del> .72%)	\ /
			PSEG ( <del>6.15</del> 6.21%) / RE	, ,
			( <del>0.25</del> 0.26%)	
I			DFAX Allocation:	
1			JCPL ( <del>39.21</del> 39.48%) /	
			NEPTUNE (4.054.03%) / PSEC	$\mathbf{G}$
			( <del>54.50</del> <u>54.33</u> %) / RE ( <del>2.24</del> <u>2.16</u> %	
			Load-Ratio Share Allocation	
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP	
			( <del>14.18</del> <u>14.04</u> %) / APS	
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %	6)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd	
			( <del>13.20</del> <u>13.14</u> %) / Dayton	
			( <del>2.05</del> <u>2.15</u> %) / DEOK	
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %)	/
		Replace Roseland 230	DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion	l
	b0489.12	kV breaker '12H'	( <del>12.56</del> <u>13.03</u> %) / EKPC	
		KV DICAKCI 1211	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %	6)
			/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE	]*
			( <del>0.42</del> <u>0.45</u> %) / OVEC	
			( <del>0.08</del> <u>0.07</u> %) / PECO	
			( <del>5.31</del> <u>5.29</u> %) / PENELEC	
			( <del>1.90</del> 1.89%) / PEPCO	
			( <del>3.903.82</del> %) / PPL ( <del>5.004.72</del> %)	)/
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE	
			( <del>0.25</del> <u>0.26</u> %)	

	DFAX Allocation:
	JCPL ( <del>39.21</del> <u>39.48</u> %) /
	NEPTUNE ( <del>4.05</del> <u>4.03</u> %) / PSEG
	( <del>54.50</del> <u>54.33</u> %) / RE ( <del>2.24</del> <u>2.16</u> %)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)	
		Load-Ratio Share Allocation:	
		AEC ( <del>1.72</del> 1.71%) / AEP	
		( <del>14.18<u>1</u>4.04</del> %) / APS	
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)	
		/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd	
		( <del>13.20</del> <u>13.14</u> %) / Dayton	
		( <del>2.05</del> <u>2.15</u> %) / DEOK	
		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /	
		DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion	
		( <del>12.56</del> <u>13.03</u> %) / EKPC	
	Parlaga Pagaland 220	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)	
b0489.13	Replace Roseland 230 kV breaker '52H'	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*	
	KV bleaker 3211	( <del>0.42</del> <u>0.45</u> %) / OVEC	
		( <del>0.08</del> <u>0.07</u> %) / PECO	
		( <del>5.31</del> <u>5.29</u> %) / PENELEC	
		( <del>1.90</del> <u>1.89</u> %) / PEPCO	
		( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /	
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE	
		( <del>0.25</del> <u>0.26</u> %)	
		DFAX Allocation:	
		JCPL ( <del>39.21</del> <u>39.48</u> %) /	
		NEPTUNE (4.054.03%) / PSEG	
		( <del>54.50</del> <u>54.33</u> %) / RE ( <del>2.24</del> <u>2.16</u> %)	
ī		Load-Ratio Share Allocation:	
		AEC ( <del>1.72</del> 1.71%) / AEP	
		( <del>14.18</del> <u>14.04</u> %) / APS	
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)	
		/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd	
		( <del>13.20</del> <u>13.14</u> %) / Dayton	
		( <del>2.05</del> <u>2.15</u> %) / DEOK	
		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /	
		DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion	
b0489.14	Replace Roseland 230	( <del>12.56</del> <u>13.03</u> %) / EKPC	
00407.14	kV breaker '41H'	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)	
		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*	
		( <del>0.42</del> <u>0.45</u> %) / OVEC	
		( <del>0.08</del> <u>0.07</u> %) / PECO	
		( <del>5.31</del> <u>5.29</u> %) / PENELEC	
		( <del>1.90</del> <u>1.89</u> %) / PEPCO	
		( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /	
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE	
		( <del>0.25</del> <u>0.26</u> %)	
		DFAX Allocation:	

	JCPL ( <del>39.21</del> <u>39.48</u> %) /
	NEPTUNE ( <del>4.05</del> <u>4.03</u> %) / PSEG
	( <del>54.50</del> <u>54.33</u> %) / RE ( <del>2.24</del> <u>2.16</u> %)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Tra	ansmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
b0489.15	Replace Roseland 230 kV breaker '72H'	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS  (6.055.61%) / ATSI (7.928.10%)  / BGE (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%) /  DPL (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%)  / ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC  (0.080.07%) / PECO  (5.315.29%) / PENELEC  (1.901.89%) / PEPCO  (3.903.82%) / PPL (5.004.72%) /  PSEG (6.156.21%) / RE  (0.250.26%)  DFAX Allocation:  JCPL (39.2139.48%) /  NEPTUNE (4.054.03%) / PSEG  (54.5054.33%) / RE (2.242.16%)
b0498	Loop the 5021 circuit into New Freedom 500 kV substation	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP

	DFAX Allocation:
	AEC ( <del>8.37</del> <u>13.46</u> %) / JCPL
	( <del>25.68</del> <u>25.00</u> %) / NEPTUNE
	( <del>3.11</del> 2.97%) / PECO
	( <del>19.78</del> <u>17.71</u> %) / PSEG
	(41.3639.30%) / RE (1.701.56%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Upgrade the 20H circuit b0498.1 breaker PSEG (100%) Upgrade the 22H circuit b0498.2 breaker PSEG (100%) Upgrade the 30H circuit b0498.3 breaker PSEG (100%) Upgrade the 32H circuit b0498.4 breaker PSEG (100%) Upgrade the 40H circuit b0498.5 breaker PSEG (100%) Upgrade the 42H circuit b0498.6 breaker PSEG (100%) AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton MAPP Project – install (<del>2.05</del>2.15%) / DEOK new 500 kV transmission (3.183.23%) / DL (1.681.73%)from Possum Point to / DPL (2.582.65%) / Dominion Calvert Cliffs and install a b0512 (<del>12.56</del>13.03%) / EKPC DC line from Calvert (<del>1.94</del>1.77%) / JCPL Cliffs to Vienna and a DC (3.823.84%) / ME (1.881.93%) line from Calvert Cliffs to / NEPTUNE\* (<del>0.42</del><u>0.45</u>%) / **Indian River** OVEC (0.080.07%) / PECO (<del>5.31</del>5.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (<del>5.00</del>4.72%) / PSEG (6.156.21%) / RE (0.250.26%)Install 100 MVAR b0565 capacitor at Cox's Corner 230 kV substation PSEG (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) New Essex – Kearney 138 JCPL (23.49%) / NEPTUNE\* b0814 kV circuit and Kearney (1.61%) / PENELEC (5.37%) / 138 kV bus tie PSEG (67.03%) / RE (2.50%) Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* b0814.1 breaker '1-SHT' with 80 (1.61%) / PENELEC (5.37%) / kA breaker PSEG (67.03%) / RE (2.50%) Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* b0814.2 breaker '15HF' with 80 kA (1.61%) / PENELEC (5.37%) / breaker PSEG (67.03%) / RE (2.50%) Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* breaker '14HF' with 80 kA b0814.3 (1.61%) / PENELEC (5.37%) / breaker PSEG (67.03%) / RE (2.50%) Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* b0814.4 breaker '10HF' with 80 kA (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%) breaker Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* breaker '2HT' with 80 kA b0814.5 (1.61%) / PENELEC (5.37%) / breaker PSEG (67.03%) / RE (2.50%) Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* b0814.6 breaker '22HF' with 80 kA (1.61%) / PENELEC (5.37%) / breaker PSEG (67.03%) / RE (2.50%) JCPL (23.49%) / NEPTUNE\* Replace Kearny 138 kV b0814.7 breaker '4HT' with 80 kA (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%) breaker Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* b0814.8 breaker '25HF' with 80 kA (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%) breaker Replace Essex 138 kV JCPL (23.49%) / NEPTUNE\* breaker '2LM' with 63 kA (1.61%) / PENELEC (5.37%) / b0814.9 breaker and 2.5 cycle PSEG (67.03%) / RE (2.50%) contact parting time

<sup>\*</sup>Neptune Regional Transmission System, LLC

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required To	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
b0829	Build Branchburg to Roseland 500 kV circuit as part of Branchburg – Hudson 500 kV project	AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)
b0829.6	Replace Branchburg 500 kV breaker 91X	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP
b0829.9	Replace Branchburg 230 kV breaker 102H	PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Branchburg 230 b0829.11 kV breaker 32H PSEG (100%) Replace Branchburg 230 b0829.12 kV breaker 52H PSEG (100%) AEC (1.721.71%) / AEP (<del>14.18</del><u>14.04</u>%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion Build Roseland - Hudson 500 kV circuit as part of (12.5613.03%) / EKPC b0830 (1.94<u>1.77</u>%) / JCPL (3.823.84%) Branchburg – Hudson 500 kV project / ME (<del>1.88</del><u>1.93</u>%) / NEPTUNE\* (<del>0.42</del>0.45%) / OVEC (0.080.07%) / PECO (<del>5.31</del>5.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)Replace Roseland 230 b0830.1 kV breaker '82H' with 80 PSEG (100% Replace Roseland 230 b0830.2 kV breaker '91H' with 80 PSEG (100%) Replace Roseland 230 kV breaker '22H' with 80 b0830.3 kA PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace 138/13 kV transformers with 230/13 ComEd (2.51%) / Dayton b0831 kV units as part of (0.09%) / PENELEC (2.75%) / Branchburg – Hudson 500 ECP\*\* (2.45%) / PSEG kV project (88.74%) / RE (3.46%) AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (<del>3.18</del>3.23%) / DL (<del>1.68</del>1.73%) / Build Hudson 500 kV DPL (2.582.65%) / Dominion switching station as part of (<del>12.56</del>13.03%) / EKPC b0832 Branchburg – Hudson 500 (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) / ME (<del>1.88</del><u>1.93</u>%) / NEPTUNE\* kV project (<del>0.42</del>0.45%) / OVEC (0.080.07%) / PECO (<del>5.31</del>5.29%) / PENELEC (1.901.89%) / PEPCO (<del>3.90</del>3.82%) / PPL (<del>5.00</del>4.72%) / PSEG (6.156.21%) / RE (0.250.26%)AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion Build Roseland 500 kV switching station as part of (<del>12.56</del>13.03%) / EKPC b0833 Branchburg – Hudson 500 (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) kV project / ME (<del>1.88</del><u>1.93</u>%) / NEPTUNE\* (<del>0.42</del>0.45%) / OVEC (0.080.07%) / PECO (<del>5.31</del>5.29%) / PENELEC (<del>1.90</del>1.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

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

<sup>\*\*</sup>East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

Replace Linden 138 kV

b1013	Replace Linden 138 kV	
01013	breaker '7PB'	PSEG (100%)
	Reconductor South Mahwah -	JCPL (29.01%) / NEPTUNE*
b1017	Waldwick 345 kV J-3410	(2.74%) / PSEG (64.85%) / RE
	circuit	(2.53%) / ECP** (0.87%)
	Reconductor South Mahwah -	JCPL (29.18%) / NEPTUNE*
b1018	Waldwick 345 kV K-3411	(2.74%) / PSEG (64.68%) / RE
	circuit	(2.53%) / ECP** (0.87%)
	Replace wave trap, line	
b1019.1	disconnect and ground switch	
01017.1	at Roseland on the F-2206	
	circuit	PSEG (100%)
	Replace wave trap, line	
b1019.2	disconnect and ground switch	
01017.2	at Roseland on the B-2258	
	circuit	PSEG (100%)
	Replace 1-2 and 2-3 section	
b1019.3	disconnect and ground	
01017.5	switches at Cedar Grove on	
	the F-2206 circuit	PSEG (100%)
	Replace 1-2 and 2-3 section	
b1019.4	disconnect and ground	
01017.1	switches at Cedar Grove on	
	the B-2258 circuit	PSEG (100%)
	Replace wave trap, line	
b1019.5	disconnect and ground switch	
01017.5	at Cedar Grove on the F-2206	
	circuit	PSEG (100%)
	Replace line disconnect and	
b1019.6	ground switch at Cedar Grove	
	on the K-2263 circuit	PSEG (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

		 1
	Replace 2-4 and 4-5 section	
b1019.7	disconnect and ground	
01019.7	switches at Clifton on the B-	
	2258 circuit	PSEG (100%)
	Replace 1-2 and 2-3 section	
b1019.8	disconnect and ground	
01019.8	switches at Clifton on the K-	
	2263 circuit	PSEG (100%)
	Replace line, ground, 230 kV	
b1019.9	main bus disconnects at	
01019.9	Athenia on the B-2258	
	circuit	PSEG (100%)
	Replace wave trap, line,	
	ground 230 kV breaker	
b1019.10	disconnect and 230 kV main	
	bus disconnects at Athenia	
	on the K-2263 circuit	PSEG (100%)

Required T	ransmission 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%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Convert the West Orange 138 kV substation, the two Roseland – West Orange b1154 138 kV circuits, and the Roseland – Sewaren 138 kV circuit from 138 kV to 230 kV PSEG (96.18%) / RE (3.82%) Build a new 230 kV circuit from Branchburg to b1155 Middlesex Sw. Rack. Build a new 230 kV substation at JCPL (4.61%) / PSEG (91.75%) Middlesex / RE (3.64%) Replace Branchburg 230 kV breaker '81H' with 63 b1155.3 PSEG (100%) Replace Branchburg 230 b1155.4 kV breaker '72H' with 63 PSEG (100%) Replace Branchburg 230 kV breaker '61H' with 63 b1155.5 PSEG (100%) Replace Branchburg 230 kV breaker '41H' with 63 b1155.6 PSEG (100%) Convert the Burlington, Camden, and Cuthbert Blvd 138 kV substations, the 138 kV circuits from Burlington b1156 to Camden, and the 138 kV circuit from Camden to Cuthbert Blvd. from 138 kV to 230 kV PSEG (96.18%) / RE (3.82%) Replace Camden 230 kV b1156.13 breaker '22H' with 80 kA PSEG (100%) Replace Camden 230 kV b1156.14 breaker '32H' with 80 kA PSEG (100%) Replace Camden 230 kV b1156.15 breaker '21H' with 80 kA PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace New Freedom b1156.16 230 kV breaker '50H' with 63 kA PSEG (100%) Replace New Freedom 230 kV breaker '41H' with b1156.17 63 kA PSEG (100%) Replace New Freedom 230 kV breaker '51H' with b1156.18 63 kA PSEG (100%) Rebuild Camden 230 kV b1156.19 to 80 kA PSEG (100%) Rebuild Burlington 230 b1156.20 kV to 80 kA PSEG (100%) Reconductor the PSEG portion of the Burlington – b1197.1 Croydon circuit with 1590 **ACSS** PSEG (100%) Re-configure the Lawrence 230 kV b1228 substation to breaker and HTP (0.14%) / ECP (0.22%) / half PSEG (95.83%) / RE (3.81%) Build a new 69 kV substation (Ridge Road) and build new 69 kV b1255 circuits from Montgomery - Ridge Road - Penns Neck/Dow Jones PSEG (96.18%) / RE (3.82%) AEC (0.23%) / BGE (0.97%) / Convert the existing ComEd (2.32%) / Dayton 'D1304' and 'G1307' 138 (0.13%) / JCPL (1.17%) / kV circuits between b1304.1 Neptune (0.07%) / HTP Roseland – Kearny – (16.05%) / PENELEC (2.97%) / Hudson to 230 kV PEPCO (1.04%) / ECP (2.11%) / operation PSEG (70.16%) / RE (2.78%)

Required Transmission Enhancements		Annual Revenue Requirem	ent Responsible Customer(s)
			AEC (0.23%) / BGE (0.97%) /
	Expand existing Bergen		ComEd (2.32%) / Dayton
	230 kV substation and		(0.13%) / JCPL (1.17%) /
b1304.2	reconfigure the Athenia		Neptune (0.07%) / HTP
	230 kV substation to		(16.05%) / PENELEC (2.97%) /
	breaker and a half scheme		PEPCO (1.04%) / ECP (2.11%) /
			PSEG (70.16%) / RE (2.78%)
			AEC (0.23%) / BGE (0.97%) /
	Build second 230 kV underground cable from Bergen to Athenia		ComEd (2.32%) / Dayton
			(0.13%) / JCPL (1.17%) /
b1304.3			Neptune (0.07%) / HTP
			(16.05%) / PENELEC (2.97%) /
			PEPCO (1.04%) / ECP (2.11%) /
			PSEG (70.16%) / RE (2.78%)
	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%) /
b1304.4			Neptune (0.07%) / HTP
			(16.05%) / PENELEC (2.97%) /
			PEPCO (1.04%) / ECP (2.11%) /
			PSEG (70.16%) / RE (2.78%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Athenia 230 kV b1304.5 breaker '21H' with 80 kA PSEG (100%) Replace Athenia 230 kV b1304.6 breaker '41H' with 80 kA PSEG (100%) Replace South Waterfront b1304.7 230 kV breaker '12H' with 80 kA PSEG (100%) Replace South Waterfront b1304.8 230 kV breaker '22H' with 80 kA PSEG (100%) Replace South Waterfront b1304.9 230 kV breaker '32H' with PSEG (100%) Replace South Waterfront b1304.10 230 kV breaker '52H' with 80 kA PSEG (100%) Replace South Waterfront b1304.11 230 kV breaker '62H' with 80 kA PSEG (100%) Replace South Waterfront b1304.12 230 kV breaker '72H' with 80 kA PSEG (100%) Replace South Waterfront b1304.13 230 kV breaker '82H' with 80 kA PSEG (100%) Replace Essex 230 kV b1304.14 breaker '20H' with 80 kA PSEG (100%)

Required Transmission Enhancements		Annual Revenue Requireme	ent 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%)

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

	Required To	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> 3.23%) / DL ( <del>1.68</del> 1.73%) /
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
	b1410	Replace Salem 500 kV	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	01410	breaker '11X'	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			PSEG ( <del>96.06</del> 96.17%) / RE
l			( <del>3.94</del> <u>3.83</u> %)
ı			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			(14.18/14.04%) / APS
			(6.055.61%) / ATSI (7.928.10%)
			/ BGE (4.23 <u>4.36</u> %) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) / DL ( <del>1.68</del> 1.73%) /
			DPL ( <del>2.58</del> 2.65%) / Dominion
			( <del>12.56</del> 13.03%) / EKPC
	b1411	Replace Salem 500 kV	( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%)
	01411	breaker '12X'	/ ME ( <del>1.881.93</del> %) / NEPTUNE*
			( <del>0.42</del> 0.45%) / OVEC
			( <del>0.08</del> 0.07%) / PECO
			( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.903.82</del> %) / PPL ( <del>5.004.72</del> %) /
			PSEG ( <del>6.156.21</del> %) / RE
			(0.250.26%)
ı			DFAX Allocation:
ĺ			PSEG (96.0696.17%) / RE
1			1220 (5000 <u>5011</u> 70)7 112

			( <del>3.94</del> <u>3.83</u> %)
* Neptune Region	al Transmission System	m, LLC	

	Required Tr	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
i			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
	b1412	Replace Salem 500 kV	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	01712	breaker '20X'	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.90</del> <u>3.82</u> %) / PPL ( <u>5.004.72</u> %) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
ı			DFAX Allocation:
			PSEG ( <del>96.0696.17</del> %) / RE
			( <del>3.94</del> <u>3.83</u> %)
ı			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			(14.1814.04%) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE (4.234.36%) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton ( <del>2.05</del> 2.15%) / DEOK
			( <del>2.03</del> 2.15%)/ DEOK ( <del>3.18</del> 3.23%)/ DL ( <del>1.68</del> 1.73%)/
			DPL (2.582.65%) / Dominion
		Replace Salem 500 kV	(12.5613.03%) / EKPC
	b1413		( <del>12.30</del> 13.03%)/ERFC ( <del>1.94</del> 1.77%)/JCPL ( <del>3.82</del> 3.84%)
		breaker '21X'	/ ME ( <del>1.881.93</del> %) / NEPTUNE*
			(0.420.45%) / OVEC
			( <del>0.08</del> 0.07%) / PECO
			( <del>5.31</del> 5.29%) / PENELEC
			( <del>3.51</del> 5.29%)/ PENELEC ( <del>1.90</del> 1.89%)/ PEPCO
			( <del>3.90</del> 3.82%)/PPL ( <del>5.004.72</del> %)/
			PSEG ( <del>6.156.21</del> %) / RE
			$(\frac{0.250.26\%}{0.250.26\%})$
l			DFAX Allocation:
			DFAA AHOCAUOH;

			PSEG ( <del>96.06</del> 96.17%) / RE ( <del>3.94</del> 3.83%)
* Neptune	Regional Transmission System	m, LLC	

	Required To	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
	b1414	Replace Salem 500 kV	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	01111	breaker '31X'	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.420.45</del> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			(1.901.89%) / PEPCO
			(3.903.82%) / PPL (5.004.72%) /
			PSEG (6.156.21%) / RE
l			( <del>0.25</del> <u>0.26</u> %)
ı			DFAX Allocation:
			PSEG ( <del>96.06</del> 96.17%) / RE ( <del>3.94</del> 3.83%)
ļ			Load-Ratio Share Allocation:
1			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> 14.04%) / APS
			( <del>6.05</del> 5.61%) / ATSI ( <del>7.92</del> 8.10%)
			/ BGE (4.234.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
			( <del>3.18</del> 3.23%)/DL( <del>1.68</del> 1.73%)/
			DPL (2.582.65%) / Dominion
		Davida Calaus 500 lay	( <del>12.56</del> 13.03%) / EKPC
	b1415	Replace Salem 500 kV	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
		breaker '32X'	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
ı			DFAX Allocation:
			PSEG ( <del>96.06</del> <u>96.17</u> %) / RE

			( <del>3.94</del> <u>3.83</u> %)
* Neptune R	Regional Transmission System	m, LLC	

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Advance n0666.10 (Replace Hudson 230 kV b1752 breaker '2HB' with 80 kA (without TRV cap, so actually 63 kA)) PSEG (100%) Marion 138 kV breaker '7PM' - delay the relay b1753 time to increase the contact parting time to 2.5 cycles PSEG (100%) Marion 138 kV breaker '3PM' - delay the relay time to increase the b1754 contact parting time to 2.5 cycles PSEG (100%) Marion 138 kV breaker '6PM' - delay the relay b1755 time to increase the contact parting time to 2.5 PSEG (100%) cycles AEC (4.96%) / JCPL (44.20%) / Build a second 230 kV NEPTUNE\* (0.53%) / HTP b1787 circuit from Cox's Corner (0.15%) / ECP\*\* (0.16%) / - Lumberton PSEG (48.08%) / RE (1.92%) Install a reactor along the b2034 Kearny - Essex 138 kV line PSEG (100%) Replace Sewaren 138 kV b2035 breaker '11P' PSEG (100%) Replace Sewaren 138 kV b2036 breaker '21P' PSEG (100%) Replace PVSC 138 kV b2037 breaker '452' PSEG (100%) Replace PVSC 138 kV b2038 breaker '552' PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Annual Revenue Requirement Required Transmission Enhancements Responsible Customer(s) Replace Bayonne 138 kV b2039 breaker '11P' PSEG (100%) Reconductor the Mickleton - Gloucester b2139 230 kV parallel circuits with double bundle PSEG (61.11%) / PECO (36.45%) / RE (2.44%) conductor Re-configure the Brunswick 230 kV and 69 b2146 kV substations PSEG (96.16%) / RE (3.84%) Construct Jackson Rd. 69 kV substation and loop the Cedar Grove - Hinchmans Ave into Jackson Rd. and b2151 construct Hawthorne 69 kV substation and build 69 kV circuit from Hinchmans Ave -Hawthorne - Fair Lawn PSEG (100%) Reconfigure the Linden, Bayway, North Ave, and Passaic Valley S.C. 138 b2159 kV substations. Construct

PSEG (72.61%) / HTP (24.49%)

/ RE (2.90%)

station

and loop new 138 kV circuit to new airport

<sup>\*</sup>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) **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton (2.052.15%) / DEOK (3.183.23%)/ DL (<del>1.68</del>1.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC Install -100/+525As specified under the procedures **MVAR** detailed (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) / dynamic in b0216 Attachment ME (1.881.93%) / NEPTUNE\* reactive device at Black H-18B. (<del>0.42</del>0.45%) / OVEC (<del>0.08</del>0.07%) Oak Section 1.b / PECO (<del>5.31</del>5.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)**DFAX Allocation:** APS (<del>53.02</del>53.10%) / Dominion (<del>33.27</del>36.32%) / PEPCO  $(\frac{13.71}{10.58\%})$ As specified under the Install Wylie AEC (11.83%) / DPL (19.40%) / third procedures detailed in Dominion (13.81%) / JCPL b0218 Ridge 500/345kV Attachment H-18B, transformer (15.56%) / PECO (39.40%) Section 1.b Upgrade coolers AEC (11.83%) / DPL (19.40%) / on b0220 Wylie Ridge 500/345 Dominion (13.81%) / JCPL kV #7 (15.56%) / PECO (39.40%) APS (50.98%) / BGE (13.42%) / DPL (2.03%) / Dominion Install fourth Bedington b0229 500/138 kV (14.50%) / ME (1.43%) / PEPCO (17.64%)As specified under the APS (79.16%) / BGE (3.61%) / Install fourth procedures detailed in DPL (0.86%) / Dominion Meadowbrook 500/138 b0230 (11.75%) / ME (0.67%) / PEPCO Attachment H-18B. kV Section 1.b (3.95%)

\* Neptune Regional Transmission System, LLC

required	Transmission Emiancements	Annual Revenue Requiremen	it 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>†</sup>Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

<sup>††</sup>Cost allocations associated with below 500 kV elements of the project

	Required Tr	ansmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> <u>14.04</u> %) / APS
				( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
				/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				( <del>2.05</del> <u>2.15</u> %) / DEOK
				( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
				DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
		Build new Meadow	As specified under the	( <del>12.56</del> <u>13.03</u> %) / EKPC
	b0328.2	Brook – Loudoun 500	procedures detailed in	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	00320.2	kV circuit (20 of 50	Attachment H-18B,	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		miles)	Section 1.b	( <del>0.42</del> 0.45%) / OVEC
				( <del>0.08</del> <u>0.07</u> %) / PECO
				( <del>5.31</del> <u>5.29</u> %) / PENELEC
				( <del>1.90</del> <u>1.89</u> %) / PEPCO
				( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
				PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
				( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:
				Dominion ( <del>91.39</del> <u>100</u> %)→
				PEPCO (8.61%)
			As specified under the	AEC (1.85%) / BGE (21.49%) /
	1.02.42	Replace Doubs 500/230	procedures detailed in	DPL (3.91%) / Dominion
	b0343	kV transformer #2	Attachment H-18B,	(28.86%) / ME (2.97%) / PECO
			Section 1.b	(5.73%) / PEPCO (35.19%)
				, , , , , ,
			As specified under the	AEC (1.86%) / BGE (21.50%) /
	1.0244	Replace Doubs 500/230	procedures detailed in	DPL (3.91%) / Dominion
	b0344	kV transformer #3	Attachment H-18B,	(28.82%) / ME (2.97%) / PECO
			Section 1.b	(5.74%) / PEPCO (35.20%)
			As specified under the	AEC (1.85%) / BGE (21.49%) /
		Replace Doubs 500/230	procedures detailed in	DPL (3.90%) / Dominion
	b0345	kV transformer #4	Attachment H-18B,	(28.83%) / ME (2.98%) / PECO
		K v Halistotilici #4	Section 1.b	(5.75%) / PEPCO (35.20%)
			Section 1.0	(3.7370) / 1 E1 CO (33.2070)

Required T	ransmission 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	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP     (14.1814.04%) / APS  (6.055.61%) / ATSI (7.928.10%)  / BGE (4.234.36%) / ComEd     (13.2013.14%) / Dayton     (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%) /  DPL (2.582.65%) / Dominion     (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%)  / ME (1.881.93%) / NEPTUNE*     (0.420.45%) / OVEC     (0.080.07%) / PECO     (5.315.29%) / PENELEC     (1.901.89%) / PEPCO  (3.903.82%) / PPL (5.004.72%) /  PSEG (6.156.21%) / RE     (0.250.26%)  DFAX Allocation:  APS (70.9578.44%) / PEPCO     (29.0521.56%)
b0347.2	Build new Mt. Storm – Meadow Brook 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP     (14.1814.04%) / APS  (6.055.61%) / ATSI (7.928.10%)  / BGE (4.234.36%) / ComEd     (13.2013.14%) / Dayton     (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%) /  DPL (2.582.65%) / Dominion     (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%)  / ME (1.881.93%) / NEPTUNE*     (0.420.45%) / OVEC     (0.080.07%) / PECO     (5.315.29%) / PENELEC     (1.901.89%) / PEPCO  (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE     (0.250.26%)

				DFAX Alloc APS (42.5843.43% (57.4256.5	) / Dominion
*	Neptune	Regional	Transmission	System,	LLC

Required T	ransmission 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	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP
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 (1.721.71%) / AEP

( <del>57.42</del> 56.57%	Dominion  )
* Neptune Regional Transmission System,	LLC

Load-Ratio Share A  AEC (1.721.71%  (14.1814.04%)  (6.055.61%) / ATSI (  / BGE (4.234.36%)  (13.2013.14%) /  (2.052.15%) / I	) / AEP / APS
(14.1814.04%) (6.055.61%) / ATSI ( / BGE (4.234.36%) (13.2013.14%) / (2.052.15%) / I	/ APS
(6.055.61%) / ATSI ( / BGE (4.234.36%) (13.2013.14%) / (2.052.15%) / I	
/ BGE (4.234.36%) (13.2013.14%)/ (2.052.15%)/I	
( <del>13.20</del> <u>13.14</u> %) / ( <del>2.05</del> <u>2.15</u> %) / Γ	<del>7.92</del> 8.10%)
$(2.052.15\%)/\Gamma$	/ ComEd
	Dayton
	DEOK
(3.183.23%) / DL $(4.3.183.23%)$	<del>.68</del> 1.73%)/
DPL ( <del>2.58</del> <u>2.65</u> %) /	Dominion
$(\frac{12.5613.03}{1})$	EKPC
b0347.5 Replace Harrison 500 (1.941.77%) / JCPL (	( <del>3.82</del> 3.84%)
	NEPTUNE*
(0.420.45%)/(0.420.45%)	OVEC
(0.080.07%)/I	PECO
( <del>5.31</del> <u>5.29</u> %) / PE	NELEC
(1.901.89%) / P	EPCO
( <del>3.90</del> 3.82%) / PPL ( <del>5</del>	<del>.00</del> 4.72%)/
PSEG ( <del>6.15</del> <u>6.21</u> 9	%)/RE
( <del>0.25</del> <u>0.26</u> %	5)
DFAX Alloca	tion:
APS ( <del>70.95</del> <u>78.44</u> %)	) / PEPCO
( <del>29.05</del> <u>21.56</u>	%)
Load-Ratio Share A	Allocation:
AEC ( <del>1.72</del> <u>1.71</u> %	) / AEP
(14.1814.04%)	/ APS
( <del>6.05</del> <u>5.61</u> %) / ATSI (	<del>7.92</del> 8.10%)
/ BGE ( <del>4.23</del> <u>4.36</u> %)	
( <del>13.20</del> 13.14%)/	•
$(2.052.15\%) / \Gamma$	
( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.</del>	
Upgrade (per ABB   DPL (2.582.65%) / (12.5612.02%)	Dominion
b0347.6   Operator (per ABB)   (12.5613.03%) / inspection) breaker HL-6   (10.41.77%) / ICPN /	EKPC
( <del>1.94<u>1.7/</u>%)/JCPL</del> (	
/ ME ( <del>1.88</del> <u>1.93</u> %) / N	
(0.420.45%)/(0.420.45%)	
(0.080.07%) / I	
( <del>5.31</del> <u>5.29</u> %) / PE	
$(\frac{1.901.89}{})$ / P	
( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5</del>	
PSEG ( <del>6.15</del> <u>6.21</u> 9	*
( <del>0.25</del> <u>0.26</u> %	5)

	DFAX Allocation:
	APS ( <del>70.95</del> <u>78.44</u> %) / PEPCO
	( <del>29.05</del> <u>21.56</u> %)

	Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> <u>14.04</u> %) / APS
				( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
				/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				( <del>2.05</del> <u>2.15</u> %) / DEOK
				( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
				DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
		Unarada (nor ADD		( <del>12.56</del> <u>13.03</u> %) / EKPC
	b0347.7	Upgrade (per ABB inspection) breaker HL-7		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
		hispection) breaker TiL-7		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
				( <del>0.42</del> 0.45%) / OVEC
				( <del>0.08</del> <u>0.07</u> %) / PECO ( <del>5.31</del> <u>5.29</u> %)
				/ PENELEC ( <del>1.90</del> <u>1.89</u> %) /
				PEPCO ( <del>3.90</del> <u>3.82</u> %) / PPL
				( <del>5.00</del> 4.72%) / PSEG ( <del>6.15</del> 6.21%)
				/ RE ( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:
				APS ( <del>70.95</del> <u>78.44</u> %) / PEPCO
				( <del>29.05</del> <u>21.56</u> %)
1				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> 14.04%) / APS
				( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
				/ BGE (4.234.36%) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				(2.052.15%) / DEOK
				(3.183.23%) / DL (1.681.73%) /
		Upgrade (per ABB		DPL (2.582.65%) / Dominion
	b0347.8	inspection) breaker HL-8		( <del>12.56</del> <u>13.03</u> %) / EKPC
		mspection, oreaser 112 o		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
				/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
				(0.42 <u>0.45</u> %) / OVEC
				( <del>0.08</del> <u>0.07</u> %) / PECO ( <del>5.31</del> <u>5.29</u> %)
				/ PENELEC ( <del>1.90</del> <u>1.89</u> %) /
				PEPCO (3.903.82%) / PPL
				( <del>5.004.72</del> %) / PSEG ( <del>6.15</del> <u>6.21</u> %)
				/ RE ( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:

	APS ( <del>70.95</del> <u>78.44</u> %) / PEPCO
	( <del>29.05</del> <u>21.56</u> %)

<sup>\*</sup>Neptune Regional Transmission System, LLC

	Required 11		Affilial Revenue Requirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
			(4.23 <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
			DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %)
		Upgrade (per ABB	/ Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC
	b0347.9	inspection) breaker HL-	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
		10	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /
			PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%) /
			PPL ( <del>5.00</del> <u>4.72</u> %) / PSEG
			( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			APS ( <del>70.95</del> <u>78.44</u> %) / PEPCO
			(00 0501 560/)
			( <del>29.05</del> 21.56%)
			Load-Ratio Share Allocation:
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd
			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /
			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)
		Upgrade (per ABB	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC
	b0347.10	Inspection) Hatfield 500	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /
	b0347.10	1 2	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*
	b0347.10	Inspection) Hatfield 500	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /
	b0347.10	Inspection) Hatfield 500	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC
	b0347.10	Inspection) Hatfield 500	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /
	b0347.10	Inspection) Hatfield 500	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG
	b0347.10	Inspection) Hatfield 500	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)
	b0347.10	Inspection) Hatfield 500	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)  DFAX Allocation:
	b0347.10	Inspection) Hatfield 500	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

	Required Transmission Emiliarections 7 mile			
ī				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /
				ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
				( <del>4.23</del> <u>4.36</u> %) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
				DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %)
		Upgrade (per ABB		/ Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC
	b0347.11	Inspection) Hatfield		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
		500 kV breakers HFL-3		ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
				( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /
				PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
				( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) /
				PPL ( <del>5.00</del> <u>4.72</u> %) / PSEG
				( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:
				APS ( <del>70.95</del> <u>78.44</u> %) / PEPCO
				(00.0501.500)
				( <del>29.05</del> <u>21.56</u> %)
				Load-Ratio Share Allocation:
				Load-Ratio Share Allocation: AEC (1.721.71%) / AEP
				Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /
				Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE
				Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd
				Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton
				Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /
				Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%)
		Upgrade (per ABB		Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC
	b0347.12	Inspection) Hatfield		Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /
	b0347.12	1 2		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*
	b0347.12	Inspection) Hatfield		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /
	b0347.12	Inspection) Hatfield		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC
	b0347.12	Inspection) Hatfield		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /
	b0347.12	Inspection) Hatfield		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG
	b0347.12	Inspection) Hatfield		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)
	b0347.12	Inspection) Hatfield		Load-Ratio Share Allocation:     AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /     ATSI (7.928.10%) / BGE     (4.234.36%) / ComEd     (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /     DL (1.681.73%) / DPL (2.582.65%)     / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /     ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /     PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /     PPL (5.004.72%) / PSEG     (6.156.21%) / RE (0.250.26%)  DFAX Allocation:
	b0347.12	Inspection) Hatfield		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

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ı			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /
			ATSI ( <del>7.92</del> 8.10%) / BGE
			(4.23 <u>4.36</u> %) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.183.23</del> %) /
			DL ( <del>1.681.73</del> %) / DPL ( <del>2.582.65</del> %)
	1 00 47 10	Upgrade (per ABB	/ Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC
	b0347.13	Inspection) Hatfield	(1.94 <u>1.77</u> %) / JCPL (3.82 <u>3.84</u> %) /
		500 kV breakers HFL-6	ME ( <del>1.88</del> 1.93 %) / NEPTUNE*
			( <del>0.420.45</del> %) / OVEC ( <del>0.080.07</del> %) /
			PECO ( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) / PSEG
			,
l			(6.156.21%) / RE (0.250.26%) <b>DFAX Allocation:</b>
ı			
			APS ( <del>70.95</del> <u>78.44</u> %) / PEPCO
			(20.0521.56%)
			(29.0521.56%)
			Load-Ratio Share Allocation:
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /
		Upgrade (per ABB	Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%)
	b0347.14	Upgrade (per ABB Inspection) Hatfield	Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC
	b0347.14	Inspection) Hatfield	Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /
	b0347.14	1 2	Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC
	b0347.14	Inspection) Hatfield	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*
	b0347.14	Inspection) Hatfield	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) /
	b0347.14	Inspection) Hatfield	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC
	b0347.14	Inspection) Hatfield	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /
	b0347.14	Inspection) Hatfield	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG
	b0347.14	Inspection) Hatfield	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

	Required Transmission Emilancements		Load-Ratio Share Allocation:	
ı				
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP	
			( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /	
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE	
			(4.23 <u>4.36</u> %) / ComEd	
			( <del>13.20</del> <u>13.14</u> %) / Dayton	
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /	
			DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %)	
		Upgrade (per ABB	/ Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC	
	b0347.15	Inspection) Hatfield	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /	
		500 kV breakers HFL-9	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*	
			( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /	
			PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC	
			( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) /	
			PPL ( <del>5.00</del> <u>4.72</u> %) / PSEG	
			( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)	
			DFAX Allocation:	
			APS ( <del>70.95</del> <u>78.44</u> %) / PEPCO	
			(20.0521.500)	
			( <del>29.05</del> <u>21.56</u> %)	
1			Load-Ratio Share Allocation:	
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP	
1			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /	
1			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE	
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd	
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton	
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /	
			Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%)	
		Upgrade (per ABB	Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC	
	b0347.16	inspection) Harrison	Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /	
	b0347.16		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*	
	b0347.16	inspection) Harrison	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) /	
	b0347.16	inspection) Harrison	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC	
	b0347.16	inspection) Harrison	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /	
	b0347.16	inspection) Harrison	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG	
	b0347.16	inspection) Harrison	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)	
	b0347.16	inspection) Harrison	Load-Ratio Share Allocation:     AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /     ATSI (7.928.10%) / BGE     (4.234.36%) / ComEd     (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /     DL (1.681.73%) / DPL (2.582.65%)     / Dominion (12.5613.03%) / EKPC     (1.941.77%) / JCPL (3.823.84%) /     ME (1.881.93%) / NEPTUNE*     (0.420.45%) / OVEC (0.080.07%) /     PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) /     PPL (5.004.72%) / PSEG     (6.156.21%) / RE (0.250.26%)  DFAX Allocation:	
	b0347.16	inspection) Harrison	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)	

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (<del>3.18</del>3.23%) / DL (<del>1.68</del>1.73%) / DPL (<del>2.58</del>2.65%) / Dominion (<del>12.56</del>13.03%) / EKPC Replace Meadow b0347.17 Brook 138 kV breaker (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) / 'MD-10' ME (1.881.93%) / NEPTUNE\* (<del>0.42</del>0.45%) / OVEC (<del>0.08</del>0.07%) / PECO (5.315.29%) / PENELEC (<del>1.90</del>1.89%) / PEPCO (<del>3.90</del>3.82%) / PPL (5.004.72%) / PSEG (<del>6.15</del>6.21%) / RE (<del>0.25</del>0.26%) **DFAX Allocation:** APS (42.5843.43%) / Dominion (57.4256.57%)**Load-Ratio Share Allocation:** AEC (<del>1.72</del><u>1.71</u>%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (<del>3.18</del>3.23%) / DL (<del>1.68</del>1.73%) / DPL (<del>2.58</del>2.65%) Replace Meadow / Dominion (<del>12.56</del>13.03%) / EKPC b0347.18 Brook 138 kV breaker (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) / 'MD-11' ME (1.881.93%) / NEPTUNE\* (<del>0.42</del>0.45%) / OVEC (<del>0.08</del>0.07%) / PECO (5.315.29%) / PENELEC (<del>1.90</del>1.89%) / PEPCO (<del>3.90</del>3.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)**DFAX Allocation:** APS (42.5843.43%) / Dominion (57.4256.57%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

	110 401100 110		Tailliadi Revenue Requirement Responsione Customer(s)
ı			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
			(4.23 <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
			DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		D 1 M 1	( <del>2.58</del> 2.65%) / Dominion
	10047.10	Replace Meadow	( <del>12.56</del> 13.03%) / EKPC
	b0347.19	Brook 138 kV breaker	( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%) /
		'MD-12'	ME (1.881.93%) / NEPTUNE*
			( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%) /
			PECO ( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%)
			/ PPL ( <del>5.004</del> .72%) / PSEG
			$(\frac{6.15}{6.21})$ / RE ( $\frac{0.25}{6.25}$ ).26%)
ļ			DFAX Allocation:
1			APS (42.5843.43%) / Dominion
			( <del>57.42</del> 56.57%)
I			`
_			Load-Ratio Share Allocation:
			<b>Load-Ratio Share Allocation:</b> AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			Load-Ratio Share Allocation: AEC ( <del>1.72</del> <u>1.71</u> %) / AEP ( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
			Load-Ratio Share Allocation: AEC ( <del>1.72</del> 1.71%) / AEP ( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) / ATSI ( <del>7.92</del> 8.10%) / BGE
			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd
			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton
			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /
			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL
		Replace Meadow	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion
	b0347 20	Replace Meadow Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC
	b0347.20	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /
	b0347.20	1	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC
	b0347.20	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /
	b0347.20	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*
	b0347.20	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) /
	b0347.20	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC
	b0347.20	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%)
	b0347.20	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG
	b0347.20	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL  (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%)  / PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)  DFAX Allocation:
	b0347.20	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%)  / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

	1 1 1		Annual Revenue Requirement Responsible Customer(s)
ı			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
			(4.23 <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
			DL ( <del>1.68</del> <u>1.73</u> %) / DPL
		Danlaga Mandayy	( <del>2.58</del> 2.65%) / Dominion
	1.0247.21	Replace Meadow	( <del>12.56</del> <u>13.03</u> %) / EKPC
	b0347.21	Brook 138 kV breaker	( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%) /
		'MD-14'	ME ( <del>1.881.93</del> %) / NEPTUNE*
			( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%) /
			PECO ( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%)
			/ PPL ( <del>5.00</del> 4.72%) / PSEG
			$(\frac{6.15}{6.21})$ / RE $(\frac{0.25}{0.26})$
			DFAX Allocation:
l			APS (42.5843.43%) / Dominion
			( <del>57.42</del> 56.57%)
			(31.7230.31/0)
I			` /
! 			Load-Ratio Share Allocation:
1			<b>Load-Ratio Share Allocation:</b> AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			Load-Ratio Share Allocation: AEC ( <del>1.72</del> <u>1.71</u> %) / AEP ( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
			Load-Ratio Share Allocation: AEC ( <del>1.72</del> 1.71%) / AEP ( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) / ATSI ( <del>7.92</del> 8.10%) / BGE
			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd
			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton
			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /
			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL
		Replace Meadow	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion
	b0347.22	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC
	b0347.22	1	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /
	b0347.22	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL  (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*
	b0347.22	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL  (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /
	b0347.22	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC
	b0347.22	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL  (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%)
	b0347.22	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG
	b0347.22	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL  (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%)  / PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)
	b0347.22	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL  (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%)  / PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)  DFAX Allocation:
	b0347.22	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL  (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%)  / PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

	Required Tra	ensmission Enhancements	Annual Revenue Requiremen	t Responsible Customer(s)
				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> 1.71%) / AEP
				( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /
				ATSI ( <del>7.92</del> 8.10%) / BGE
				(4.234.36%) / ComEd
				( <del>13.20</del> 13.14%) / Dayton
				( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
				DL ( <del>1.68</del> 1.73%) / DPL
		D 1 M 1		( <del>2.58</del> 2.65%) / Dominion
	1-0247.02	Replace Meadow		( <del>12.56</del> <u>13.03</u> %) / EKPC
	b0347.23	Brook 138 kV breaker		( <del>1.941.77</del> %) / JCPL ( <del>3.82</del> 3.84%) /
		'MD-16'		ME ( <del>1.88</del> 1.93%) / NEPTUNE*
				( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /
				PECO ( <del>5.31</del> 5.29%) / PENELEC
				( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%)
				/ PPL ( <del>5.004</del> .72%) / PSEG
				( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:
				APS (42.5843.43%) / Dominion
				( <del>57.42</del> 56.57%)
•				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
				ATSI ( <del>7.92</del> 8.10%) / BGE
				(4.234.36%) / ComEd
				( <del>13.20</del> 13.14%) / Dayton
				( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
				DL ( <del>1.68</del> 1.73%) / DPL
				( <del>2.58</del> 2.65%) / Dominion
	1.0247.24	Replace Meadow		( <del>12.5613</del> .03%) / EKPC
	b0347.24	Brook 138 kV breaker		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
		'MD-17'		ME ( <del>1.88</del> 1.93%) / NEPTUNE*
				( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%) /
				PECO ( <del>5.31</del> 5.29%) / PENELEC
				( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%)
				/ PPL ( <del>5.004.72</del> %) / PSEG
				( <del>6.15</del> 6.21%) / RE ( <del>0.25</del> 0.26%)
•				DFAX Allocation:
				APS (42.5843.43%) / Dominion
				( <del>57.42</del> 56.57%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

	Required 112	ansmission Enhancements	Annual Revenue Requiremen	
ı				<b>Load-Ratio Share Allocation:</b>
	b0347.25	Replace Meadow Brook 138 kV breaker 'MD-18'		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> <u>5.61</u> %)
				/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
				(4.234.36%) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
				/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
				( <del>2.58</del> 2.65%) / Dominion
				( <del>12.56</del> <u>13.03</u> %) / EKPC
				( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
				ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
				( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
				/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
				( <del>1.90</del> <u>1.89</u> %) / PEPCO
				( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /
				PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
				( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:
				APS (42.5843.43%) / Dominion
				( <del>57.42</del> <u>56.57</u> %)
		Replace Meadow Brook 138 kV breaker 'MD-22#1 CAP'		Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%)
				/ ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
				( <del>4.23</del> <u>4.36</u> %) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
				/ DL ( <del>1.68<u>1.73</u>%)</del> / DPL
	b0347.26			( <del>2.58</del> <u>2.65</u> %) / Dominion
				( <del>12.56</del> <u>13.03</u> %) / EKPC
				( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
				ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
				( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
				/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
				( <del>1.90</del> 1.89%) / PEPCO
				( <del>3.90</del> 3.82%) / PPL ( <del>5.004.72</del> %) /
				PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
				(0.250.26%)
				DFAX Allocation:
				APS (42.5843.43%) / Dominion
				APS ( <del>42.38</del> 43.43%) / Dominion

		( <del>57.42</del> <u>56.57</u> %)
*Neptune Regional Transmission Sys	tem, LLC	

Required Transmission Enhancements		Affilial Revenue Requirement Responsible Customer(s)	
,		Load-Ratio Share Allocation:	
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP	
		( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /	
	Replace Meadow Brook 138 kV breaker 'MD-4'	ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE	
		(4.23 <u>4.36</u> %) / ComEd	
		( <del>13.20</del> <u>13.14</u> %) / Dayton	
		( <del>2.05</del> <u>2.15</u> %) / DEOK ( <del>3.18</del> <u>3.23</u> %) /	
		DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %)	
		/ Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC	
b0347.27		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /	
		ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*	
		( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /	
		PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC	
		( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%) /	
		PPL ( <del>5.00<u>4</u>.72</del> %) / PSEG	
		( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)	
.		DFAX Allocation:	
		APS (42.5843.43%) / Dominion	
		( <del>57.42</del> <u>56.57</u> %)	
		Load-Ratio Share Allocation:	
		Load-Ratio Share Allocation: AEC (1.721.71%) / AEP	
		Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /	
		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE	
		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd	
		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton	
		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /	
		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)	
	Replace Meadow	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC	
b0347.28	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /	
b0347.28	<u> </u>	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*	
b0347.28	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /	
b0347.28	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC	
b0347.28	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /	
b0347.28	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG	
b0347.28	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)	
b0347.28	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)  DFAX Allocation:	
b0347.28	Brook 138 kV breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)	

<sup>\*</sup>Neptune Regional Transmission System, LLC

	Required Transmission Emiancements Ai		Amilian Revenue Requirement Responsible Customer(s)	
				Load-Ratio Share Allocation:
	b0347.29	Replace Meadowbrook 138 kV breaker 'MD-6'		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /
				ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
				(4.23 <u>4.36</u> %) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
				DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %)
				/ Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC
				( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
				ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
				( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /
				PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
				( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) /
				PPL ( <del>5.00</del> <u>4.72</u> %) / PSEG
				( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:
				APS (42.5843.43%) / Dominion
				( <del>57.42</del> <u>56.57</u> %)
				Load-Ratio Share Allocation:
				Load-Ratio Share Allocation: AEC (1.721.71%) / AEP
1				Load-Ratio Share Allocation: AEC ( <del>1.72</del> 1.71%) / AEP ( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /
				Load-Ratio Share Allocation: AEC ( <del>1.72</del> 1.71%) / AEP ( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) / ATSI ( <del>7.92</del> 8.10%) / BGE
				Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd
				Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton
				Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /
				Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)
		Replace Meadowbrook		Load-Ratio Share Allocation: AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC
	b0347.30	Replace Meadowbrook		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /
	b0347.30	Replace Meadowbrook 138 kV breaker 'MD-7'		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*
	b0347.30			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /
	b0347.30			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC
	b0347.30			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /
	b0347.30			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG
	b0347.30			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)
	b0347.30			Load-Ratio Share Allocation:     AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /     ATSI (7.928.10%) / BGE     (4.234.36%) / ComEd     (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /     ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) /     PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) /     PPL (5.004.72%) / PSEG     (6.156.21%) / RE (0.250.26%)  DFAX Allocation:
	b0347.30			Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Tra	ansmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
b0347.31	Replace Meadowbrook 138 kV breaker 'MD-8'	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%)  / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%)  / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)  DFAX Allocation: APS (42.5843.43%) / Dominion (57.4256.57%)
b0347.32	Replace Meadowbrook 138 kV breaker 'MD-9'	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%)

\*Neptune Regional Transmission System, LLC

Required 11	ansmission Enhancements	Annual Revenue Requiremen	it 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		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%)  / ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%)  / DL (1.681.73%) / DPL  (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%)  / PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO  (3.903.82%) / PPL (5.004.72%) /  PSEG (6.156.21%) / RE  (0.250.26%)  DFAX Allocation:  APS (19.1061.86%) / ATSI  (25.82%) / Dayton (18.4311.46%)  / DEOK (29.3220.33%) / DL  (1.19%) / EKPC (5.966.35%) /  OVEC (0.18%)

Required 1	ransmission 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%)

required	Taristrission Linarecticits	Tunidal Revenue Requirement	responsible edistorner(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%)

Required	Transmission Enhancements	Annual Revenue Requirement Responsible Customer(s)		
				1.71%) / AEP
				APS ( <del>6.05</del> <u>5.61</u> %) /
			,	8.10%) / BGE
			,	%) / ComEd
				4%) / Dayton
	Install a breaker failure		•	EOK ( <del>3.18</del> <u>3.23</u> %) /
	auto-restoration scheme		` /	/ DPL ( <del>2.58</del> <u>2.65</u> %)
b0418	at Cabot 500 kV for the		,	5613.03%)/EKPC
	failure of the #6 breaker		`	CPL (3.823.84%) /
				%) / NEPTUNE*
				VEC ( <del>0.08</del> <u>0.07</u> %) /
			•	29%) / PENELEC
			·	PCO ( <del>3.90</del> 3.82%) /
	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers		,	. <u>72</u> %) / PSEG
! <del> </del>				RE ( <del>0.25</del> <u>0.26</u> %)
				hare Allocation:
				1.71%) / AEP
				APS ( <del>6.05</del> <u>5.61</u> %) /
			,	8.10%) / BGE
				%) / ComEd
			•	4%) / Dayton
			`	EOK ( <del>3.18</del> <u>3.23</u> %) /
				/ DPL ( <del>2.58</del> <u>2.65</u> %) 56 <u>13.03</u> %) / EKPC
b0419			,	CPL ( <del>3.82</del> 3.84%) /
				%) / NEPTUNE*
				VEC ( <del>0.08</del> 0.07%) /
				29%) / PENELEC
			,	EPCO ( <del>3.90</del> 3.82%) /
			·	.72%) / PSEG
			,	RE ( <del>0.25</del> 0.26%)
1				Allocation:
				(100%)
	Operating Procedure to		7115	(20070)
	open the Black Oak			
	500/138 kV transformer			
b0420	#3 for the loss of			
	Hatfield – Ronco 500 kV			
	and the Hatfield #3			
	Generation		APS	(100%)
<u> </u>				\ - ~ / ~ /

	Upgrade substation equipment and	
	reconductor the Tidd –	
b0445	Mahans Lane – Weirton	
	138kV circuit with 954	
	ACSR	APS (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required 1	Tarisi inssion Emilancements	Annual Revenue Requireme	it Responsible Customer(s)
	Raise limiting		
	structures on Albright		
b0460	– Bethelboro 138 kV to		
	raise the rating to 175		
	MVA normal 214		A DG (1000()
	MVA emergency		APS (100%)
,			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.1814.04</del> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
			( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
			DL ( <del>1.68</del> 1.73%) / DPL ( <del>2.58</del> 2.65%)
			/ Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC
			( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
	Construct an Amos to		ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	Welton Spring to WV	As specified under the	( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /
b0491	state line 765 kV	procedures detailed in	PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
	circuit (APS	Attachment H-19B	( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) /
	equipment)		PPL ( <del>5.00</del> <u>4.72</u> %) / PSEG
			( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (<del>1.72</del>1.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (<del>3.18</del>3.23%) / DL (<del>1.68</del>1.73%) / DPL (<del>2.58</del>2.65%) / Dominion (<del>12.56</del>13.03%) / EKPC (<del>1.941.77</del>%) / JCPL (<del>3.82</del>3.84%) / ME (1.881.93%) / NEPTUNE\* Construct Welton As specified under the (<del>0.42</del>0.45%) / OVEC (<del>0.08</del>0.07%) / Spring to Kemptown b0492 procedures detailed in PECO (5.315.29%) / PENELEC line (APS 765 kV Attachment H-19B  $(\frac{1.901.89\%}{1.89\%})$  / PEPCO  $(\frac{3.903.82\%}{1.9903.82\%})$ equipment) / PPL (<del>5.004</del>.72%) / PSEG (<del>6.15</del>6.21%) / RE (<del>0.25</del>0.26%) **DFAX Allocation:** 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%)Replace Eastalco 230 b0492.3 kV breaker D-26 APS (100%) Replace Eastalco 230 b0492.4 kV breaker D-28 APS (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Eastalco 230 kV breaker D-31 b0492.5 APS (100%) **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (<del>3.18</del>3.23%) / DL (<del>1.68</del>1.73%) / DPL (2.582.65%) / Dominion (<del>12.56</del>13.03%) / EKPC (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) / Replace existing Kammer 765/500 kV ME (1.881.93%) / NEPTUNE\* b0495 (0.420.45%) / OVEC (0.080.07%)transformer with a new / PECO (<del>5.31</del>5.29%) / PENELEC larger transformer (1.901.89%) / PEPCO (3.903.82%) / PPL (<del>5.004</del>.72%) / PSEG (6.156.21%) / RE (0.250.26%)**DFAX Allocation:** AEP (58.84%) / APS (<del>31.25</del>3.61%) / BGE (<del>19.37</del>16.86%) / Dayton (<del>9.85</del>1.39%) / DEOK  $(\frac{13.77}{1.98\%})$  / EKPC  $(\frac{2.73}{0.49\%})$ / PEPCO (<del>23.03</del>16.83%) Reconductor the Powell b0533 Mountain – Sutton 138 kV line APS (100%) Install a 28.61 MVAR b0534 capacitor on Sutton 138 kVAPS (100%) Install a 44 MVAR b0535 capacitor on Dutch Fork 138 kV APS (100%) Replace Doubs circuit b0536 breaker DJ1 APS (100%) Replace Doubs circuit b0537 breaker DJ7 APS (100%) Replace Doubs circuit b0538 breaker DJ10 APS (100%)

	Reconductor Albright -	
b0572.1	Mettiki – Williams –	
00372.1	Parsons – Loughs Lane	
	138 kV with 954 ACSR	APS (100%)

1104011001		Initial Revenue Requirement	Tresponsible Custoffier(s)
	Reconductor Albright –		
b0572.2	Mettiki – Williams –		
00072.2	Parsons – Loughs Lane		
	138 kV with 954 ACSR		APS (100%)
	Reconfigure circuits in		
b0573	Butler – Cabot 138 kV		
	area		APS (100%)
			<b>Load-Ratio Share Allocation:</b>
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %)
			/ ATSI ( <del>7.92<u>8.10</u>%)</del> / BGE
			( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
			/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
	Replace Fort Martin 500 kV breaker FL-1		(2.582.65%) / Dominion
b0577			( <del>12.56</del> 13.03%) / EKPC
			( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%) /
			ME ( <del>1.88</del> 1.93%) / NEPTUNE*
			(0.420.45%) OVEC $(0.080.07%)$
			/ PECO ( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%)
			/ PPL ( <del>5.004</del> .72%) / PSEG
			(6.156.21%) / RE $(0.250.26%)$
			DFAX Allocation:
			APS (100%)
	Install 33 MVAR 138		` /
b0584	kV capacitor at		
	Necessity 138 kV		APS (100%)
	Increase Cecil 138 kV		` '
	capacitor size to 44		
	MVAR, replace five 138		
1.0505	kV breakers at Cecil due		
b0585	to increased short circuit		
	fault duty as a result of		
	the addition of the Prexy		
	substation		APS (100%)
	Increase Whiteley 138		( 3,1)
b0586	kV capacitor size to 44		
	MVAR		APS (100%)
	111 1 1 111		1110 (100/0)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

Required 1	ransmission 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%)
L0501	Install a 25.2 MVAR		
b0591	capacitor at Seneca Caverns 138 kV		APS (100%)
	Rebuild Elko – Carbon		` /
b0673	Center Junction using 230 kV construction		APS (100%)
	250 K v Construction		APS (97.68%) / DL (0.96%) /
b0674	Construct new Osage –		PENELEC (1.09%) / ECP**
00074	Whiteley 138 kV circuit		(0.01%) / PSEG (0.25%) / RE (0.01%)
	Replace the Osage 138		(0.0170)
b0674.1	kV breaker		
	'CollinsF126'		APS (100%)
			AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%)
	Convert Monocacy -		/ ME (6.37%) / NEPTUNE*
b0675.1	Walkersville 138 kV to		(0.15%) / PECO (3.09%) / PPL
	230 kV		(2.24%) / PSEG (2.42%) / RE
			(0.09%) / ECP** (0.06%)
			AEC (1.02%) / APS (81.96%)
	Convert Walkersville -		/ DPL (0.85%) / JCPL (1.75%)
b0675.2	Catoctin 138 kV to 230		/ ME (6.37%) / NEPTUNE*
30073.2	kV		(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			(0.09%) / ECP** (0.06%)

\*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
			AEC (1.02%) / APS (81.96%) /
	Convert Ringgold -		DPL (0.85%) / JCPL (1.75%) /
b0675.3	Catoctin 138 kV to 230		ME (6.37%) / NEPTUNE*
00073.3	kV		(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			(0.09%) / ECP** (0.06%)
			AEC (1.02%) / APS (81.96%) /
	Convert Catoctin -		DPL (0.85%) / JCPL (1.75%) /
b0675.4	Carroll 138 kV to 230		ME (6.37%) / NEPTUNE*
00073.4	kV		(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			(0.09%) / ECP** (0.06%)
			AEC (1.02%) / APS (81.96%) /
	Convert portion of		DPL (0.85%) / JCPL (1.75%) /
b0675.5	Ringgold Substation from 138 kV to 230 kV		ME (6.37%) / NEPTUNE*
00073.3			(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			(0.09%) / ECP** (0.06%)
			AEC (1.02%) / APS (81.96%) /
	Convert Catoctin Substation from 138 kV to 230 kV		DPL (0.85%) / JCPL (1.75%) /
b0675.6			ME (6.37%) / NEPTUNE*
00073.0			(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			(0.09%) / ECP** (0.06%)
			AEC (1.02%) / APS (81.96%) /
	Convert portion of		DPL (0.85%) / JCPL (1.75%) /
b0675.7	Carroll Substation from		ME (6.37%) / NEPTUNE*
00073.7	138 kV to 230 kV		(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			(0.09%) / ECP** (0.06%)
			AEC (1.02%) / APS (81.96%) /
	Convert Monocacy		DPL (0.85%) / JCPL (1.75%) /
b0675.8	Substation from 138 kV		ME (6.37%) / NEPTUNE*
00073.8	to 230 kV		(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			(0.09%) / ECP** (0.06%)

\*Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required Tr	ansmission 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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 1	ransmission Ennancements	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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required 1	ransmission Ennancements	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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required	ransmission Ennancements	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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required	ransmission 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%)

required i	ransmission Enhancements	Annuai Revenue Requirement	responsible eustomer(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%)

required 1	Talishinssion Emilancements	Annual Revenue Requirement	responsible editioner(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%)

Required 1	ransmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
	Construct Braddock 138		
	kV breaker station that		
	connects the Charleroi -		
	Gordon 138 kV line,		
b1023.4	Washington - Franklin		
	138 kV line and the		
	Washington - Vanceville		
	138 kV line including a		
	66 MVAR capacitor		APS (100%)
	Increase the size of the		
b1027	shunt capacitors at Enon		
	138 kV		APS (100%)
	Raise three structures on		
b1028	the Osage - Collins Ferry		
01020	138 kV line to increase		
	the line rating		APS (100%)
	Reconductor the		
	Edgewater – Vasco Tap;		
b1128	Edgewater – Loyalhanna		
	138 kV lines with 954		
	ACSR		APS (100%)
	Reconductor the East		
b1129	Waynesboro – Ringgold		
0112)	138 kV line with 954		
	ACSR		APS (100%)
	Upgrade Double Tollgate		
b1131	– Meadowbrook MDT		
	Terminal Equipment		APS (100%)
	Upgrade Double		
b1132	Tollgate-Meadowbrook		
01102	MBG terminal		
	equipment		APS (100%)
b1133	Upgrade terminal		. = 2
	equipment at Springdale		APS (100%)
	Reconductor the		
	Bartonville –		
b1135	Meadowbrook 138 kV		
	line with high		A P.G. (1000()
	temperature conductor		APS (100%)

Required 1	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor the Eastgate		
b1137	– Luxor 138 kV;		APS (78.59%) / PENELEC
01137	Eastgate – Sony 138 kV		(14.08%) / ECP ** (0.23%) /
	line with 954 ACSR		PSEG (6.83%) / RE (0.27%)
	Reconductor the King		
b1138	Farm – Sony 138 kV line		
	with 954 ACSR		APS (100%)
	Reconductor the Yukon		
b1139	– Waltz Mills 138 kV		
01139	line with high		
	temperature conductor		APS (100%)
	Reconductor the Bracken		
b1140	Junction – Luxor 138 kV		
	line with 954 ACSR		APS (100%)
	Reconductor the		
	Sewickley – Waltz Mills		
b1141	Tap 138 kV line with		
	high temperature		
	conductor		APS (100%)
	Reconductor the		
	Bartonsville –		
b1142	Stephenson 138 kV;		
	Stonewall – Stephenson		
	138 kV line with 954		1.77 (1001)
	ACSR		APS (100%)
	Reconductor the		
b1143	Youngwood – Yukon		A DG (00 000) / DENEY E.G
	138 kV line with high		APS (89.92%) / PENELEC
	temperature conductor		(10.08%)
	Reconductor the Bull		
b1144	Creek Junction – Cabot		
	138 kV line with high		A DG (1000()
	temperature conductor		APS (100%)

<sup>\*\*</sup>East Coast Power, L.L.C.

Required	ransmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor the Lawson		
b1145	Junction – Cabot 138 kV		
	line with high		
	temperature conductor		APS (100%)
	Replace Layton -		
b1146	Smithton #61 138 kV		
01140	line structures to increase		
	line rating		APS (100%)
	Replace Smith - Yukon		
b1147	138 kV line structures to		
	increase line rating		APS (100%)
	Reconductor the		
b1148	Loyalhanna – Luxor 138		
	kV line with 954 ACSR		APS (100%)
	Reconductor the Luxor –		
1 1 1 40	Stony Springs Junction		
b1149	138 kV line with 954		
	ACSR		APS (100%)
1.1150	Upgrade terminal		, ,
b1150	equipment at Social Hall		APS (100%)
	Reconductor the		(
	Greenwood – Redbud		
b1151	138 kV line with 954		
	ACSR		APS (100%)
	Reconductor Grand Point		
b1152	<ul><li>South Chambersburg</li></ul>		APS (100%)
	Replace Peters 138 kV		1112 (100/0)
b1159	breaker 'Bethel P OCB'		APS (100%)
	Replace Peters 138 kV		711 5 (10070)
b1160	breaker 'Cecil OCB'		APS (100%)
			Al 3 (100%)
b1161	Replace Peters 138 kV		A DC (1000/)
	breaker 'Union JctOCB' Replace Double Toll		APS (100%)
h1160	1		
b1162	Gate 138 kV breaker 'DRB-2'		A DC (1000/)
			APS (100%)
1.1172	Replace Double Toll		
b1163	Gate 138 kV breaker		A DC (1000/)
	'DT 138 kV OCB'		APS (100%)

Required 1		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 (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)
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

Required 1	ransmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
	Loop Carbon Center		
b1221.3	Junction – Williamette		
	line into Bear Run		APS (100%)
	Carbon Center – Carbon		
	Center Junction &		
b1221.4	Carbon Center Junction		
	– Bear Run conversion		
	from 138 kV to 230 kV		APS (100%)
	Reconductor Willow-		, ,
b1230	Eureka & Eurkea-St		
	Mary 138 kV lines		APS (100%)
			AEC (1.40%) / APS (75.74%) /
	Reconductor Nipetown –		DPL (1.92%) / JCPL (2.92%) /
b1232	Reid 138 kV with 1033		ME (6.10%) / Neptune (0.27%)
	ACCR		/ PECO (4.40%) / PENELEC
			(3.26%) / PPL (3.99%)
	Upgrade terminal		, , , , ,
b1233.1	equipment at		
	Washington		APS (100%)
	Replace structures		
b1234	between Ridgeway and		
	Paper city		APS (100%)
	Reconductor the Albright		,
1.1005	– Black Oak AFA 138		APS (30.25%) / BGE (16.10%)
b1235	kV line with 795		/ Dominion (30.51%) / PEPCO
	ACSS/TW		(23.14%)
	Upgrade terminal		, ,
	equipment at Albright,		
	replace bus and line side		
b1237	breaker disconnects and		
	leads, replace breaker		
	risers, upgrade RTU and		
	line		APS (100%)
	Install a 138 kV 44		
b1238	MVAR capacitor at		
	Edgelawn substation		APS (100%)

Install a 138 kV 44   MVAR capacitor at Ridgeway substation	Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
Ridgeway substation		Install a 138 kV 44		
Install a 138 kV 44	b1239	MVAR capacitor at		
b1240   MVAR capacitor at Elko Substation		· ·		APS (100%)
Substation		Install a 138 kV 44		
Upgrade   terminal   equipment   at   Washington   substation   on   the   GE   Plastics/DuPont terminal   Replace   structures   between   Collins   Ferry   and West Run   Install   a   138   kV   capacitor   at   Potter   Substation   APS (100%)	b1240	<u> </u>		
Description				APS (100%)
b1241   Washington substation on the GE   Plastics/DuPont terminal   APS (100%)		10		
On the GE   Plastics/DuPont terminal   Replace   Structures   btween Collins Ferry   and West Run   APS (100%)				
Plastics/DuPont terminal   APS (100%)	b1241			
Replace   Structures   between Collins   Ferry and West Run   APS (100%)				. = 5 // 5 0 //
b1242   between Collins Ferry and West Run				APS (100%)
APS (100%)   Install a 138 kV   capacitor at Potter Substation   APS (100%)		<u> </u>		
Install a 138 kV   capacitor at Potter Substation	b1242	1		A DG (1000()
b1243   capacitor at Potter Substation				APS (100%)
Substation	1 10 42			
Belace Butler 138 kV breaker '1-2 BUS 138'   APS (100%)	01243	*		A DC (1000/)
Direaker '1-2 BUS 138'   APS (100%)				APS (100%)
Install 2nd 500/138 kV   transformer at 502   Junction   Reconductor   approximately 2.17 miles   of Bedington   Shepherdstown 138 kV   with 954 ACSR   APS (100%)	b1261	1		A DG (1000()
b1383   transformer at 502   Junction   Reconductor approximately 2.17 miles of Bedington — Shepherdstown 138 kV with 954 ACSR   APS (100%)				APS (100%)
Junction   PENELEC (1.34%)	L1202			ADC (02 270/ ) / DI (5 200/ ) /
Reconductor   approximately 2.17 miles   of   Bedington   -   Shepherdstown   138 kV   with 954 ACSR   APS (100%)	01383			
approximately 2.17 miles of Bedington — Shepherdstown 138 kV with 954 ACSR  Reconductor Halfway — Paramount 138 kV with 1033 ACCR  Reconductor Double Tollgate — Meadow Brook 138 kV ckt 2 with 1033 ACCR  Reconductor Double Tollgate — Meadow Brook 138 kV ckt 2 with 1033 ACCR  Reconductor Double Tollgate — Meadow Brook 138 kV ckt 2 with 1033 ACCR  Reconductor Double Tollgate — Meadow Brook 138 kV  Reconductor Feagans Brook 138 kV  Reconductor Feagans Mill — Millville 138 kV				FENELEC (1.34%)
b1384 of Bedington — Shepherdstown 138 kV with 954 ACSR  Reconductor Halfway — Paramount 138 kV with 1033 ACCR  Reconductor Double Tollgate — Meadow Brook 138 kV ckt 2 with 1033 ACCR  Reconductor Double Tollgate — Meadow Brook 138 kV ckt 2 with 1033 ACCR  Reconductor Double Tollgate — Meadow Brook 138 kV ckt 2 with 1033 ACCR  Reconductor Double Tollgate — Meadow Brook 138 kV  Reconductor Feagans B1388  Mill — Millville 138 kV				
Shepherdstown 138 kV   with 954 ACSR	h138/	1 1 1		
with 954 ACSR       APS (100%)         Reconductor Halfway – Paramount 138 kV with 1033 ACCR       APS (100%)         Reconductor Double Tollgate – Meadow Brook 138 kV ckt 2 with 1033 ACCR       APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)         Reconductor Double Tollgate – Meadow Brook 138 kV       APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)         Brook 138 kV       APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)         Reconductor Feagans Brook 138 kV       APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)	01304			
Reconductor Halfway -   Paramount 138 kV with   1033 ACCR		1 -		APS (100%)
Diagram   Diag				711 5 (10070)
1033 ACCR	b1385	1		
Reconductor   Double   Tollgate   Meadow   Brook 138 kV ckt 2 with   1033 ACCR   PEPCO (3.28%)	01000			APS (100%)
b1386       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		1		,,
Brook 138 kV ckt 2 with 1033 ACCR  Reconductor Double Tollgate — Meadow Brook 138 kV  Reconductor Feagans b1388  Mill — Millville 138 kV  APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)  APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)	1.120.6			
1033 ACCR Reconductor Double Tollgate - Meadow Brook 138 kV Reconductor Feagans b1388 Mill - Millville 138 kV  PEPCO (3.28%)  APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)	b1386			APS (93.33%) / BGE (3.39%) /
b1387       Tollgate — Meadow Brook 138 kV       APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)         B1388       Reconductor Feagans Mill – Millville 138 kV		1033 ACCR		
Brook 138 kV PEPCO (3.28%)  Reconductor Feagans b1388 Mill – Millville 138 kV		Reconductor Double		`
Brook 138 kV PEPCO (3.28%)  Reconductor Feagans b1388 Mill – Millville 138 kV	b1387	Tollgate – Meadow		APS (93.33%) / BGE (3.39%) /
b1388 Mill – Millville 138 kV				PEPCO (3.28%)
		Reconductor Feagans		
'-1 OF 4 A CCD	b1388			
With 954 ACSR APS (100%)		with 954 ACSR		APS (100%)

Required .	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor Bens Run –		
b1389	St. Mary's 138 kV with		AEP (12.40%) / APS (17.80%)
	954 ACSR		/ DL (69.80%)
b1390	Replace Bus Tie Breaker		
	at Opequon		APS (100%)
1.100.1	Replace Line Trap at		,
b1391	Gore		APS (100%)
	Replace structure on		
b1392	Belmont – Trissler 138		
	kV line		APS (100%)
	Replace structures		
b1393	Kingwood – Pruntytown		
01070	138 kV line		APS (100%)
	Upgrade Terminal		1112 (10070)
b1395	Equipment at Kittanning		APS (100%)
	Change reclosing on		711 5 (10070)
	Pruntytown 138 kV		
b1401	breaker 'P-16' to 1 shot		
	at 15 seconds		APS (100%)
	Change reclosing on		711 5 (100%)
	Rivesville 138 kV		
b1402	breaker 'Pruntytown		
01102	#34' to 1 shot at 15		
	seconds		APS (100%)
	Change reclosing on		711 5 (10070)
	Yukon 138 kV breaker		
b1403	'Y21 Shepler' to 1 shot		
	at 15 seconds		APS (100%)
	Replace the Kiski Valley		711 5 (10070)
	138 kV breaker		
b1404	'Vandergrift' with a 40		
	kA breaker		APS (100%)
	Change reclosing on		711.5 (10070)
	Armstrong 138 kV		
b1405	breaker 'GARETTRJCT'		
	at 1 shot at 15 seconds		APS (100%)
	at 1 shot at 13 seconds		711 5 (100/0)

Required T	ransmission Enhancements	Annual Revenue Requiremen	t Responsible Customer(s)
	Change reclosing on		
b1406	Armstrong 138 kV		
01400	breaker 'KITTANNING'		
	to 1 shot at 15 seconds		APS (100%)
	Change reclosing on		· · · · · · ·
1.1.407	Armstrong 138 kV		
b1407	breaker 'BURMA' to 1		
	shot at 15 seconds		APS (100%)
	Replace the Weirton 138		, ,
b1408	kV breaker 'Tidd 224'		
	with a 40 kA breaker		APS (100%)
	Replace the Cabot 138		
b1409	kV breaker 'C9 Kiski		
01409	Valley' with a 40 kA		
	breaker		APS (100%)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> 14. <del>04</del> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE (4.234.36%) / ComEd
			$(\frac{13.2013.14\%}{})$ / Dayton
			( <del>2.05</del> 2.15%) / DEOK
	Terminal Equipment		( <del>3.18</del> 3.23%) / DL ( <del>1.68</del> 1.73%) /
			DPL (2.582.65%) / Dominion
			( <del>12.56</del> 13.03%) / EKPC
			( <del>1.941.77</del> %) / JCPL ( <del>3.82</del> 3.84%)
			/ ME ( <del>1.88</del> 1.93%) / NEPTUNE*
b1507.2	upgrade at Doubs		( <del>0.42</del> 0.45%) / OVEC
	substation		( <del>0.08</del> 0.07%) / PECO
			( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.903.82</del> %) / PPL ( <del>5.004.72</del> %) /
			PSEG ( <del>6.15</del> 6.21%) / RE
			$(\frac{0.250.26}{0.25})$
			DFAX Allocation:
			APS ( <del>24.07</del> 21.37%) / BGE
			( <del>9.92</del> 9.63%) / Dominion
			( <del>54.43</del> 59.60%) / PEPCO
			$(\frac{11.58}{11.58}9.40\%)$
	I	L .	` /

Required Tr	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
.		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
		/ BGE ( <del>4.23<u>4</u>.36</del> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> <u>2.15</u> %) / DEOK
		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
		DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	Mt. Storm – Doubs transmission line rebuild in Maryland – Total line	( <del>12.56</del> <u>13.03</u> %) / EKPC
		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
b1507.3		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
01307.3		( <del>0.42</del> <u>0.45</u> %) / OVEC
	mileage for APS is 2.71 miles	( <del>0.08</del> <u>0.07</u> %) / PECO
	illies	( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		APS ( <del>24.07</del> <u>21.37</u> %) / BGE
		( <del>9.92</del> <u>9.63</u> %) / Dominion
		( <del>54.43</del> <u>59.60</u> %) / PEPCO
		( <del>11.58</del> <u>9.40</u> %)
b1510	Install 59.4 MVAR	
01310	capacitor at Waverly	APS (100%)
h1670	Install a 230 kV breaker	
b1672	at Carbon Center	APS (100%)
1.0520	Replace Doubs circuit	
b0539	breaker DJ11	APS (100%)
10740	Replace Doubs circuit	
b0540	breaker DJ12	APS (100%)
	Replace Doubs circuit	
b0541	breaker DJ13	APS (100%)
	Replace Doubs circuit	1112 (10070)
b0542	breaker DJ20	APS (100%)
	Replace Doubs circuit	1115 (10070)
b0543	breaker DJ21	APS (100%)
		AFS (100%)
b0544	Remove instantaneous reclose from Eastalco	
00344		A DC (1000/)
	circuit breaker D-26	APS (100%)

\* Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Remove instantaneous b0545 reclose from Eastalco circuit breaker D-28 APS (100%) **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (<del>3.18</del>3.23%) / DL (<del>1.68</del>1.73%) / DPL (2.582.65%) / Dominion **MVAR** Install 200 (<del>12.56</del>13.03%) / EKPC b0559 capacitor Meadow at (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) / Brook 500 kV substation ME (1.881.93%) / NEPTUNE\* (<del>0.42</del>0.45%) / OVEC (<del>0.08</del>0.07%) / PECO (5.315.29%) / PENELEC (<del>1.90</del>1.89%) / PEPCO (<del>3.90</del>3.82%) / PPL (<del>5.004</del>.72%) / PSEG (<del>6.15</del>6.21%) / RE (<del>0.25</del>0.26%) **DFAX Allocation:** APS (42.5843.43%) / Dominion (57.4256.57%)**Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (<del>3.18</del>3.23%) / DL (<del>1.68</del>1.73%) / DPL (2.582.65%) / Dominion 250 **MVAR** Install b0560 capacitor at Kemptown (<del>12.56</del>13.03%) / EKPC 500 kV substation (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) / ME (1.881.93%) / NEPTUNE\* (<del>0.42</del>0.45%) / OVEC (<del>0.08</del>0.07%) / PECO (5.315.29%) / PENELEC (<del>1.90</del>1.89%) / PEPCO (<del>3.90</del>3.82%) / PPL (<del>5.004</del>.72%) / PSEG (<del>6.15</del>6.21%) / RE (<del>0.25</del>0.26%) **DFAX Allocation:** 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required '	Transmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
		/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> <u>2.15</u> %) / DEOK
		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
	Build a 300 MVAR	DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	Switched Shunt at	( <del>12.56</del> <u>13.03</u> %) / EKPC
	Doubs 500 kV and	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
b1803	increase (~50 MVAR) in	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	size the existing	( <del>0.42<u>0.45</u>%)</del> / OVEC
	Switched Shunt at	( <del>0.08</del> <u>0.07</u> %) / PECO
	Doubs 500 kV	( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		(3.903.82%) / PPL (5.004.72%) /
		PSEG ( <del>6.156.21</del> %) / RE
		( <del>0.25</del> 0.26%)
		DFAX Allocation:
		APS ( <del>24.07</del> <u>21.37</u> %) / BGE ( <del>9.92</del> 9.63%) / Dominion
		( <del>3.92</del> 9.03%) / Dollillion ( <del>54.43</del> 59.60%) / PEPCO
		( <del>34.43</del> <u>35.00</u> %)/1EFCO ( <del>11.58</del> 9.40%)
		Load-Ratio Share Allocation:
		AEC ( <del>1.721.71</del> %) / AEP
		$(\frac{14.1814.04}{14.04})$ / APS
		( <del>6.05</del> 5.61%) / ATSI ( <del>7.92</del> 8.10%)
		/ BGE (4.234.36%) / ComEd
		( <del>13.20</del> 13.14%) / Dayton
		( <del>2.05</del> 2.15%) / DEOK
		( <del>3.183.23</del> %) / DL ( <del>1.68</del> 1.73%) /
	Install a new 600 MVAR	DPL ( <del>2.582.65</del> %) / Dominion
b1804	SVC at Meadowbrook	( <del>12.56</del> 13.03%) / EKPC
	500kV	( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%)
		/ ME ( <del>1.881.93</del> %) / NEPTUNE*
		( <del>0.42<u>0.45</u>%)</del> / OVEC
		( <del>0.08</del> <u>0.07</u> %) / PECO
		( <del>5.31</del> 5.29%) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> 3.82%)/PPL( <del>5.00</del> 4.72%)/
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE

			( <del>0.25</del> <u>0.26</u> %)
I			(**====================================
			DFAX Allocation:
			APS (42.5843.43%) / Dominion
			( <del>57.42</del> 56.57%)
1		Replace relaying at the	`
		Mt. Airy substation on	
	b1816.1		
		the Carroll - Mt. Airy	
		230 kV line	APS (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Adjust the control settings of all existing capacitors at Mt Airy 34.5kV, Monocacy 138kV, Ringgold 138kV served b1816.2 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%) Replace existing unidirectional LTC controller on the No. 4, b1816.3 230/138 kV transformer Carroll substation with a bidirectional unit APS (100%) Isolate and bypass the b1816.4 138 kV reactor at Germantown Substation APS (100%) Replace 336.4 ACSR conductor on the Catoctin - Carroll 138 kV line using 556.5 ACSR (26/7)equivalent on existing structures (12.7 miles), b1816.6 800 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%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace the 1200 A wave trap, line risers, breaker risers with 1600 b1822 capacity terminal equipment at Reid 138 kV SS APS (100%) Replace the 800 A wave trap with a 1200 A wave b1823 trap at Millville 138 kV substation APS (100%) Reconductor Grant Point - Guilford 138kV line b1824 approximately 8 miles of 556 ACSR with 795 ACSR APS (100%) Replace the 800 Amp line trap at Butler 138 b1825 kV Sub on the Cabot East 138 kV line APS (100%) Change the CT ratio at b1826 Double Toll Gate 138 kV SS on MDT line APS (100%) Change the CT ratio at b1827 Double Toll Gate 138 kV SS on MBG line APS (100%) Reconductor Bartonville – Stephenson b1828.1 3.03 mile 138 kV line of 556 ACSR with 795

APS (100%)

ACSR

	1	1	responsible Customer(s)
	Reconductor the		
	Stonewall – Stephenson		
b1828.2	2.08 mile 138 kV line of		
	556 ACSR with 795		
	ACSR		APS (100%)
	Replace the existing 138		
	kV 556.5 ACSR		
	substation conductor		
b1829	risers with 954 ACSR at		
01029	the Redbud 138 kV		
	substation, including but		
	not limited to the line		
	side disconnect leads		APS (100%)
	Replace 1200 A wave		
	trap and 1024 ACAR		
	breaker risers at Halfway		
1.1020	138 kV substation, and		
b1830	replace 1024 ACAR		
	breaker risers at		
	Paramount 138 kV		
	substation		APS (100%)
	Replace the 1200 A line		,
	side and bus side		
	disconnect switches with		
	1600 A switches, replace		
b1832	bus side, line side, and		
	disconnect leads at Lime		
	Kiln SS on the Doubs -		
	Lime Kiln 1 (207) 230		
	kV line terminal		APS (100%)
	Replace the 1200 A line		. ( ,
	side and bus side		
	disconnect switches with		
	1600 A switches, replace		
b1833	bus side, line side, and		
	disconnect leads at Lime		
	Kiln SS on the Doubs -		
	Lime Kiln 2 (231) 230		
	kV line terminal		APS (100%)
	a, inic terminar		1115 (10070)

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

APS (100%)

SS

<sup>\*</sup> Neptune Regional Transmission System, LLC

Kcquiica i	Tansinission Enhancements	Alliuai Revenue Requirement	Responsible Customer(s)
	Construct a 138 kV line		
b1840	between Buckhannon		
01040	and Weston 138 kV		
	substations		APS (100%)
	Replace line trap at		
b1902	Stonewall on the		
01702	Stephenson 138 kV line		
	terminal		APS (100%)
	Loop the Homer City-		
	Handsome Lake 345 kV		
b1941	line into the Armstrong		
01711	substation and install a		
	345/138 kV transformer		APS (67.86%) / PENELEC
	at Armstrong		(32.14%)
	Change the CT ratio at		
b1942	Millville to improve the		
	Millville – Old Chapel		A P.G. (1000())
	138 kV line ratings		APS (100%)
	Convert Moshannon		APS (41.06%) / DPL (6.68%) /
b1964	substation to a 4 breaker		JCPL (5.48%) / ME (10.70%) /
	230 kV ring bus		Neptune* (0.53%) / PECO
			(15.53%) / PPL (20.02%)
b1965	Install a 44 MVAR 138		
01905	kV capacitor at Luxor substation		A DC (1000/)
	I .		APS (100%)
	Upgrade the AP portion of the Elrama – Mitchell		
	138 kV line by replace		
b1986	breaker risers on the		
	Mitchell 138 kV bus on		
	the Elrama terminal		APS (100%)
	Reconductor the Osage-		ALD (10070)
	Collins Ferry 138 kV		
	line with 795 ACSS.		
b1987	Upgrade terminal		
	equipment at Osage and		
	Collins Ferry		APS (100%)
			111 5 (10070)

Raise structures between Lake Lynn and West Run to eliminate the clearance de-rates on the West Run — Lake Lynn 138 kV line  Raise structures between Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line  Replace Weirt 138 kV breaker 'S-TORONTO226' with 63kA rated breaker Revise the reclosing of Weirt 138 kV breaker '2.26.5 XFMR'  Replace Ridgeley 138 kV breaker '42.5 XFMR'  Replace Ridgeley 138 kV breaker '42.3 XFMR OCB'  Revise the reclosing of Ridgeley 138 kV breaker '4.8 X with 40kA rated breaker APS (100%)  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker APS (100%)  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker APS (100%)  Replace Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'APS (100%)  Replace Ridgeley 138 kV breaker 'APS (100%)	Required 1	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
B1988		Raise structures between		
Clearance de-rates on the West Run - Lake Lynn     138 kV line		Lake Lynn and West		
Clearance de-rates on the   West Run - Lake Lynn   138 kV line   APS (100%)	h1088	Run to eliminate the		
138 kV line	01900			
Raise structures between Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line  Replace Weirt 138 kV breaker 'S- TORONTO226' with 63kA rated breaker  Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'  Replace Ridgeley 138 kV breaker '#2 XFMR OCB'  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'W24' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'W24' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'W24' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'I XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'I XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		West Run – Lake Lynn		
Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line		138 kV line		APS (100%)
b1989 Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line  Replace Weirt 138 kV breaker 'S-TORONTO226' with 63kA rated breaker  Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'  Replace Ridgeley 138 kV breaker '2 XFMR OCB' APS (100%)  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'RC1'  APS (100%)  Replace Ridgeley 138 kV breaker 'RC1'  APS (100%)  Replace Ridgeley 138 kV breaker 'APS (100%)		Raise structures between		
Clearance de-rates on the Collins Ferry - West Run   138 kV line   APS (100%)		Collins Ferry and West		
clearance de-rates on the Collins Ferry - West Run 138 kV line  Replace Weirt 138 kV breaker 'S- TORONTO226' with 63kA rated breaker  Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'  Replace Ridgeley 138 kV breaker '#2 XFMR OCB'  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'RC1'  APS (100%)  Replace Ridgeley 138 kV breaker 'RC1'  APS (100%)  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'I XFMR OCB' with 40kA rated breaker  APS (100%)  Replace Armstrong 138 kV breaker 'GARETTRJCT' with	<b>L</b> 1000	Run to eliminate the		
138 kV line	01989	clearance de-rates on the		
Replace Weirt 138 kV   breaker   S-TORONTO226' with   63kA rated breaker   Revise the reclosing of Weirt 138 kV breaker   2&5 XFMR'   APS (100%)		Collins Ferry - West Run		
b2095   breaker 'S-TORONTO226' with 63kA rated breaker   APS (100%)		138 kV line		APS (100%)
TORONTO226' with 63kA rated breaker  Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'  Replace Ridgeley 138 kV breaker "#2 XFMR OCB'  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker 'AR3' with 40kA rated breaker Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker Revise the reclosing of Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker "WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		Replace Weirt 138 kV		
TORON10226   with   63kA rated breaker   Revise the reclosing of   Weirt 138 kV breaker   2&5 XFMR'   APS (100%)	b2005	breaker 'S-		
Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'  Replace Ridgeley 138 kV breaker '42 XFMR OCB'  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'YC5 with 40kA rated breaker  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with	02093	TORONTO226' with		
b2096 Weirt 138 kV breaker '2&5 XFMR'  Replace Ridgeley 138 kV breaker '#2 XFMR OCB'  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'I XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		63kA rated breaker		APS (100%)
'2&5 XFMR'		Revise the reclosing of		
Replace Ridgeley 138 kV breaker '#2 XFMR OCB'  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with	b2096	Weirt 138 kV breaker		
b2097 kV breaker "#2 XFMR OCB'  Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Bevise the reclosing of Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'APS (100%)  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		'2&5 XFMR'		APS (100%)
DCB' Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'RC1' Replace Ridgeley 138 kV breaker 'RC1' Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'APS (100%)  Replace Ridgeley 138 kV breaker 'APS (100%)  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		Replace Ridgeley 138		
Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'APS (100%)  Replace Ridgeley 138 kV breaker 'APS (100%)  Replace Ridgeley 138 kV breaker 'APS (100%)  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with	b2097	kV breaker '#2 XFMR		
b2098 Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker APS (100%)  Revise the reclosing of Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'I XFMR OCB' with 40kA rated breaker APS (100%)  Replace Armstrong 138 kV breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		OCB'		APS (100%)
b2098 'AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'MC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		Revise the reclosing of		
AR3' with 40kA rated breaker  Revise the reclosing of Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  APS (100%)  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  APS (100%)  Replace Armstrong 138 kV breaker 'GARETTRJCT' with	b2008	Ridgeley 138 kV breaker		
Revise the reclosing of Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker 'YC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with	02090	'AR3' with 40kA rated		
b2099 Ridgeley 138 kV breaker 'RC1'  Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		breaker		APS (100%)
TRC1' Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		Revise the reclosing of		
Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  APS (100%)  Replace Armstrong 138 kV breaker 'GARETTRJCT' with	b2099	Ridgeley 138 kV breaker		
b2100 kV breaker 'WC4' with 40kA rated breaker APS (100%)  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker APS (100%)  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		'RC1'		APS (100%)
40kA rated breaker  Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		Replace Ridgeley 138		
b2101 Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker APS (100%)  Replace Armstrong 138 kV breaker 'GARETTRJCT' with	b2100	kV breaker 'WC4' with		
b2101 kV breaker '1 XFMR OCB' with 40kA rated breaker APS (100%)  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		40kA rated breaker		APS (100%)
b2101 OCB' with 40kA rated breaker APS (100%)  Replace Armstrong 138 kV breaker 'GARETTRJCT' with	b2101			
breaker APS (100%)  Replace Armstrong 138 kV breaker 'GARETTRJCT' with		kV breaker '1 XFMR		
b2102 Replace Armstrong 138 kV breaker 'GARETTRJCT' with		OCB' with 40kA rated		
b2102 kV breaker GARETTRJCT' with		breaker		APS (100%)
GARETTRJCT' with		Replace Armstrong 138		
GARETTRICT with	h2102			
40kA rated breaker APS (100%)	62102	'GARETTRJCT' with		
		40kA rated breaker		APS (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Armstrong 138 b2103 kV breaker 'BURMA' with 40kA rated breaker APS (100%) Replace Armstrong 138 kV breaker b2104 'KITTANNING' with 40kA rated breaker APS (100%) Replace Armstrong 138 kV breaker b2105 'KISSINGERJCT' with 40kA rated breaker APS (100%) Replace Wylie Ridge b2106 345 kV breaker 'WK-1' with 63kA rated breaker APS (100%) Replace Wylie Ridge b2107 345 kV breaker 'WK-2' with 63kA rated breaker APS (100%) Replace Wylie Ridge b2108 345 kV breaker 'WK-3' with 63kA rated breaker APS (100%) Replace Wylie Ridge b2109 345 kV breaker 'WK-4' with 63kA rated breaker APS (100%) Replace Wylie Ridge 345 kV breaker 'WK-6' b2110 with 63kA rated breaker APS (100%) Replace Wylie Ridge b2111 138 kV breaker 'WK-7' with 63kA rated breaker APS (100%) Replace Wylie Ridge b2112 345 kV breaker 'WK-5' APS (100%) Replace Weirton 138 kV b2113 breaker 'NO 6 XFMR' with 63kA rated breaker APS (100%) Replace Armstrong 138 kV breaker 'Bus-Tie' b2114 (Status On-Hold pending retirement) APS (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Add a new 138 kV line b2124.1 exit APS (100%) Construct a 138 kV ring bus and install a 138/69 b2124.2 kV autotransformer APS (100%) Add new 138 kV line exit and install a 138/25 kV b2124.3 transformer APS (100%) Construct approximately b2124.4 5.5 miles of 138 kV line APS (100%) Convert approximately 7.5 miles of 69 kV to 138 b2124.5 kV APS (100%) Install a 75 MVAR 230 b2156 kV capacitor at Shingletown Substation APS (100%) Replace 800A wave trap b2165 at Stonewall with a 1200 A wave trap APS (100%) Reconductor the Millville - Sleepy Hollow 138kV 4.25 miles of 556 ACSR with 795 ACSR, upgrade b2166 line risers at Sleepy Hollow, and change 1200 A CT tap at Millville to 800 APS (100%) For Grassy Falls 138kV Capacitor bank adjust turn-on voltage to 1.0pu with a high limit of 1.04pu, For Crupperneck b2168 and Powell Mountain 138kV Capacitor Banks adjust turn-on voltage to 1.01pu with a high limit

APS (100%)

of 1.035pu

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

#### **SCHEDULE 12 – APPENDIX**

Required	Transmission Enhancements	Annual Revenue Requirer	ment Responsible Customer(s)
	Install a 765/138 kV		
b0318	transformer at Amos		AEP (99.00%) / PEPCO (1.00%)
	Replace entrance		
	conductors, wave traps, and		
	risers at the Tidd 345 kV		
	station on the Tidd – Canton		
b0324	Central 345 kV circuit		AEP (100%)
b0447	Replace Cook 345 kV		
00447	breaker M2		AEP (100%)
b0448	Replace Cook 345 kV		
00440	breaker N2		AEP (100%)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
			( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
			DL ( <del>1.68</del> <u>1.73</u> %) / DPL
			( <del>2.58</del> <u>2.65</u> %) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
			( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
	Construct an Amos –	As specified under	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
b0490	Bedington 765 kV circuit	the procedures	( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /
00470	(AEP equipment)	detailed in	PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
	(TET equipment)	Attachment H-19B	( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%)
			/ PPL ( <del>5.00<u>4.72</u>%) / PSEG</del>
			( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			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

Required T	Transmission Enhancements	Annual Revenue Requ	uirement	Responsible Customer(s)
			Load-	Ratio Share Allocation:
			AH	EC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>1</u> 4	4.04%) / APS ( <del>6.05</del> <u>5.61</u> %) /
			ATSI (7.9	92 <u>8.10</u> %) / BGE (4 <del>.23</del> 4.36%)
			/ ComF	Ed ( <del>13.20</del> <u>13.14</u> %) / Dayton
			(2.052.1	<u>5</u> %) / DEOK ( <del>3.18</del> <u>3.23</u> %) /
			DL ( <del>1.68</del>	<del>1.73</del> %) / DPL ( <del>2.58</del> <u>2.65</u> %) /
				ion ( <del>12.56</del> <u>13.03</u> %) / EKPC
			$(\frac{1.94}{1.77})$	%) / JCPL ( <del>3.82</del> <u>3.84</u> %) / ME
		( <del>1.8</del>	<del>8</del> 1.93%) / NEPTUNE*	
	Replace Amos 138 kV	Replace Amos 138 kV		. <u>5</u> %) / OVEC ( <u>0.08</u> <u>0.07</u> %) /
b0490.2	breaker 'B'			( <del>5.31</del> <u>5.29</u> %) / PENELEC
	oreaxer B	`	9%) / PEPCO ( <del>3.90</del> 3.82%) /	
		PPL ( <del>5.0(</del>	94.72%) / PSEG ( <del>6.15</del> <u>6.21</u> %)	
				/ RE ( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:
			`	.01%) / AEP (4.39%) / APS
			` ′	BGE (4.43%) / DL (0.02%)
			`	91%) / Dominion (10.82%) /
				(11.64%) / ME (2.94%) /
				IE (1.12%) / PECO (14.51%)
				O (6.11%) / PPL (6.39%) /
			PSEC	G (15.86%) / RE (0.59%)

Required T	Transmission Enhancements	Annual Revenue Requ	uirement Responsible Customer(s)	
			Load-Ratio Share Allocation:	
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP	
			( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /	
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE ( <u>4.23</u> <u>4.36</u> %)	
			/ ComEd ( <del>13.20</del> <u>13.14</u> %) / Dayton	
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /	
			DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %) /	
			Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC	
			( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) / ME	
	Danlace Amon 120 LV			( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		Replace Amos 138 kV	( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /	
b0490.3	breaker 'B1'		PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC	
	oleaker D1	( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) /		
			PPL ( <del>5.00</del> 4.72%) / PSEG ( <del>6.15</del> 6.21%)	
		/ RE ( <del>0.25</del> <u>0.26</u> %)		
			DFAX Allocation:	
			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%)	

Required T	Transmission Enhancements	Annual Revenue Requ	uirement	Responsible Customer(s)	
			Load-	Ratio Share Allocation:	
			AE	C ( <del>1.72</del> <u>1.71</u> %) / AEP	
			( <del>14.18</del> <u>14</u>	<u>.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /	
			ATSI ( <del>7.9</del> )	2 <u>8.10</u> %) / BGE (4.23 <u>4.36</u> %)	
			/ ComE	d ( <del>13.20</del> <u>13.14</u> %) / Dayton	
			( <del>2.05</del> <u>2.15</u>	5%) / DEOK ( <del>3.18</del> <u>3.23</u> %) /	
			DL ( <del>1.68</del> ]	1.73%) / DPL ( <del>2.58</del> 2.65%) /	
			Dominio	on ( <del>12.56</del> <u>13.03</u> %) / EKPC	
			( <del>1.94</del> <u>1.77</u> %	%) / JCPL ( <del>3.82</del> <u>3.84</u> %) / ME	
	Replace Amos 138 kV breaker 'C'			( <del>1.88</del>	8 <u>1.93</u> %) / NEPTUNE*
		Danlage Ames 120 kV	( <del>0.42</del> <u>0.45</u>	5%) / OVEC ( <del>0.08</del> <u>0.07</u> %) /	
b0490.4		PECO	( <del>5.31</del> <u>5.29</u> %) / PENELEC		
	breaker C			<u>2</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) /	
			PPL ( <del>5.00</del>	4.72%) / PSEG ( <del>6.15</del> <u>6.21</u> %)	
				/ RE ( <del>0.25</del> <u>0.26</u> %)	
			I	DFAX Allocation:	
			AEC (5.0	01%) / AEP (4.39%) / APS	
			(9.26%)/	BGE (4.43%) / DL (0.02%)	
			/ DPL (6.9	91%) / Dominion (10.82%) /	
			JCPL (	(11.64%) / ME (2.94%) /	
			NEPTUNI	E (1.12%) / PECO (14.51%)	
			/ PEPCO	O (6.11%) / PPL (6.39%) /	
			PSEG	(15.86%) / RE (0.59%)	

Required T	Transmission Enhancements	Annual Revenue Requ	uirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE ( <u>4.23</u> <u>4.36</u> %)
			/ ComEd ( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
			DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %) /
			Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC
			( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) / ME
			( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	Danlage Ames 129 kV	Replace Amos 138 kV	( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /
b0490.5	breaker 'C1'		PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
	breaker C1		( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) /
			PPL ( <del>5.00</del> 4.72%) / PSEG ( <del>6.15</del> <u>6.21</u> %)
			/ RE ( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 7	Transmission Enhancements	Annual Revenue Requi	rement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE ( <u>4.23</u> <u>4.36</u> %)
			/ ComEd ( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
			DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %) /
			Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC
			( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%) / ME
			( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
10400 6	Replace Amos 138 kV		( <del>0.42<u>0.45</u>%</del> ) / OVEC ( <del>0.08<u>0.07</u></del> %) /
b0490.6	breaker 'D'	PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC	
		(1.901.89%) / PEPCO (3.903.82%) /	
			PPL (5.004.72%) / PSEG (6.156.21%)
		/ RE ( <del>0.25</del> <u>0.26</u> %)	
			DFAX Allocation:
			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%)

Required 7	Transmission Enhancements	Annual Revenue Requ	quirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE ( <u>4.23</u> <u>4.36</u> %)
			/ ComEd ( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
			DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %) /
			Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC
			( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) / ME
		Replace Amos 138 kV	( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	Danlage Amos 129 kV		( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /
b0490.7	breaker 'D2'		PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
	bleaker D2		( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) /
			PPL ( <del>5.00</del> 4.72%) / PSEG ( <del>6.15</del> 6.21%)
		/ RE ( <del>0.25</del> <u>0.26</u> %)	
			DFAX Allocation:
			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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 7	Transmission Enhancements	Annual Revenue Requ	uirement	Responsible Customer(s)
			Load-	-Ratio Share Allocation:
			AF	EC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>1</u> 4	4.04%) / APS ( <del>6.05</del> <u>5.61</u> %) /
			ATSI (7.5	92 <u>8.10</u> %) / BGE (4.23 <u>4.36</u> %)
			/ ComE	Ed ( <del>13.20</del> 13.14%) / Dayton
			$(\frac{2.05}{2.1})$	<u>.5</u> %) / DEOK ( <del>3.18</del> <u>3.23</u> %) /
			`	3 <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %) /
				ion ( <del>12.56</del> <u>13.03</u> %) / EKPC
	Replace Amos 138 kV breaker 'E'			(%) / JCPL ( <del>3.82</del> <u>3.84</u> %) / ME
				881.93%) / NEPTUNE*
		±	`	<u> 5</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /
b0490.8			PECO	( <del>5.31</del> <u>5.29</u> %) / PENELEC
			`	9%) / PEPCO ( <del>3.90</del> 3.82%) /
			PPL ( <del>5.0(</del>	9 <u>4.72</u> %) / PSEG ( <del>6.15</del> <u>6.21</u> %)
			/ RE ( <del>0.25</del> <u>0.26</u> %)	
				DFAX Allocation:
			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%) /
			NEPTUN	VE (1.12%) / PECO (14.51%)
			/ PEPC	O (6.11%) / PPL (6.39%) /
			PSEC	G (15.86%) / RE (0.59%)

Required T	Transmission Enhancements	Annual Revenue Requ	quirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE ( <u>4.234.36</u> %)
			/ ComEd ( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK ( <del>3.18</del> <u>3.23</u> %) /
			DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %) /
			Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC
			( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) / ME
	Replace Amos 138 kV breaker 'E2'	Danlaga Amas 129 kW	( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /
b0490.9		PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC	
		( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%) /	
		PPL ( <del>5.00</del> 4.72%) / PSEG ( <del>6.15</del> <u>6.21</u> %)	
		/ RE ( <del>0.25</del> <u>0.26</u> %)	
			<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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
			Loa	d-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			(14.18	3 <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
			A	ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
				( <del>4.23</del> <u>4.36</u> %) / ComEd
			,	( <del>13.20</del> <u>13.14</u> %) / Dayton
	Add two advanced		$(\frac{2.05}{2})$	2.15%) / DEOK ( <del>3.18</del> <u>3.23</u> %) /
	technology circuit breakers		,	. <del>68</del> 1.73%) / DPL ( <del>2.58</del> 2.65%)
b0504	at Hanging Rock 765 kV to			ninion ( <del>12.56</del> <u>13.03</u> %) / EKPC
00304	improve operational		,	1.77%) / JCPL ( <del>3.82</del> 3.84%) /
	performance			( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	performance		-	<u>).45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /
				CO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
			_	<u>.89</u> %) / PEPCO ( <u>3.903.82</u> %) /
				PPL ( <del>5.004.72</del> %) / PSEG
I			( <del>6.</del> ]	<del>56.21</del> %) / RE ( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:
				AEP (100%)
b0570	Reconductor East Side Lima			
	– Sterling 138 kV		AEP	(41.99%) / ComEd (58.01%)
	Reconductor West			(=0.00.1)
b0571	Millersport – Millersport		AEP (	(73.83%) / ComEd (19.26%) /
	138 kV			Dayton (6.91%)
	Establish a new 69 kV			
	circuit between the Canal			
	Road and East Wooster			
1-0740	stations, establish a new 69			
b0748	kV circuit between the West			
	Millersburg and Moreland			
	Switch stations (via Shreve),			
	add reactive support via cap banks			AEP (100%)
	Hazard Area 138 kV and 69			ALI (100/0)
b0838	kV Improvement Projects			AED (100%)
	Replace existing 450 MVA			AEP (100%)
	transformer at Twin Branch			
b0839	345 / 138 kV with a 675			
	MVA transformer		ΔFD	(99.73%) / Dayton (0.27%)
ĺ	141 4 / Hallotoffiller			(22.13/0)/ Dayton (0.41/0)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) String a second 138 kV circuit on the open tower b0840 position between Twin Branch and East Elkhart AEP (100%) Establish a new 138/69-34.5kV Station b0840.1 interconnect the existing 34.5kV network AEP (100%) Replace Baileysville 138 b0917 kV breaker 'P' AEP (100%) Replace Riverview 138 b0918 kV breaker '634' AEP (100%) Replace Torrey 138 kV b0919 breaker 'W' AEP (100%) Construct a new 345/138kV station on the Marquis-Bixby 345kV b1032.1 line near the intersection with Ross - Highland AEP (89.97%) / Dayton 69kV (10.03%)Construct two 138kV outlets to Delano 138kV b1032.2 station and to Camp AEP (89.97%) / Dayton Sherman station (10.03%)AEP (89.97%) / Dayton Convert Ross - Circleville b1032.3 69kV to 138kV (10.03%)138/69kV Install transformer at new station b1032.4 and connect in the Ross -AEP (89.97%) / Dayton Highland 69kV line (10.03%)Add a third delivery point from AEP's East Danville b1033 Station to the City of Danville. AEP (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) AEP (96.01%) / APS (0.62%) / Establish South new West Canton ComEd (0.19%) / Dayton Canton -138kV line (replacing (0.44%) / DL (0.13%) / b1034.1 Torrey - West Canton) and **PENELEC** (2.61%) \_ Wayview Wagenhals 138kV Loop the existing South AEP (96.01%) / APS (0.62%) / Canton - Wayview 138kV ComEd (0.19%) / Dayton b1034.2 circuit in-and-out of West (0.44%) / DL (0.13%) / **PENELEC** (2.61%) Canton AEP (96.01%) / APS (0.62%) / Install a 345/138kV 450 ComEd (0.19%) / Dayton b1034.3 MVA transformer at (0.44%) / DL (0.13%) / Canton Central PENELEC (2.61%) AEP (96.01%) / APS (0.62%) / Rebuild/reconductor the ComEd (0.19%) / Dayton b1034.4 Sunnyside - Torrey 138kV (0.44%) / DL (0.13%) / line **PENELEC** (2.61%) AEP (96.01%) / APS (0.62%) / Disconnect/eliminate the ComEd (0.19%) / Dayton b1034.5 West Canton 138kV (0.44%) / DL (0.13%) / terminal at Torrey Station **PENELEC** (2.61%) Replace all 138kV circuit breakers at South Canton AEP (96.01%) / APS (0.62%) / b1034.6 Station and operate the ComEd (0.19%) / Dayton station in a breaker and a (0.44%) / DL (0.13%) / half configuration PENELEC (2.61%) AEP (96.01%) / APS (0.62%) / Replace all obsolete 138kV circuit ComEd (0.19%) / Dayton breakers at the b1034.7 Torrey and Wagenhals (0.44%) / DL (0.13%) / stations **PENELEC** (2.61%)

required 1		minual revenue requireme	in Responsible Customer(s)
	Install additional 138kV circuit breakers at the West		
	Canton, South Canton,		
b1034.8	Canton Central, and		AEP (96.01%) / APS (0.62%) /
	Wagenhals stations to		ComEd (0.19%) / Dayton
	accommodate the new		(0.44%) / DL (0.13%) /
	circuits		PENELEC (2.61%)
	Establish a third 345kV		
	breaker string in the West		
	Millersport Station.		
	Construct a new West		
b1035	Millersport – Gahanna		
	138kV circuit.		
	Miscellaneous		
	improvements to 138kV		
	transmission system.		AEP (100%)
	Upgrade terminal		(
1.100.5	equipment at Poston		
b1036	Station and update remote		
	end relays		AEP (100%)
	Sag check Bonsack-		(
	Cloverdale 138 kV,		
	Cloverdale–Centerville		
	138kV, Centerville–Ivy		
	Hill 138kV, Ivy Hill–		
b1037	Reusens 138kV, Bonsack		
	Reusens 138kV and		
	Reusens–Monel–		
	Gomingo–Joshua Falls 138		AED (1000/)
	kV. Check the Crooksville -		AEP (100%)
L1020	Muskingum 138 kV sag		
b1038	and perform the required		
	work to improve the		A ED (1000)
	emergency rating		AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Perform a sag study for the Madison – Cross Street 138 kV line and perform the required work to improve the emergency rating  Rebuild an 0.065 mile section of the New Carlisle – Olive 138 kV line and change the 138 kV line switches at New Carlisle Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating Perform sag studies to raise the emergency rating of Amos – Poca 138kV AEP (100%)  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV AEP (100%)  Perform sag studies to raise the emergency rating of Kenova – South Point 138kV AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV AEP (100%)  Perform sag studies of Scottsville – Bremo 138kV to raise the emergency rating Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating AEP (100%)  Perform sag study of Otter Switch – Altavista 138kV to raise the emergency rating MAEP (100%)	Required 1	ransmission Empancements	Annuai Revenue Requireme	the Responsible Customer(s)
b1039 kV line and perform the required work to improve the emergency rating Rebuild an 0.065 mile section of the New Carlisle b1040 — Olive 138 kV line and change the 138 kV line switches at New Carlisle b1041 — Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating — AEP (100%)  Perform sag studies to raise the emergency rating of Amos – Poca 138kV — AEP (100%)  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV — AEP (100%)  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%)  Perform sag studies of Scottsville — Bremo 138kV to raise the emergency rating of Scottsville — Bremo 138kV to raise the emergency rating — Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating — Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating — Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating — Perform sag study of Otter Switch - Altavista 138kV to raise the emergency				
required work to improve the emergency rating  Rebuild an 0.065 mile section of the New Carlisle  - Olive 138 kV line and change the 138 kV line switches at New Carlisle  Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating  Perform sag studies to raise the emergency rating of Amos - Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Kenova - South Point 138kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  Perform sag studies of Tri State - Darrah 138 kV  Perform sag studies of Tri State - Darrah 138kV  Perform sag studies of Tri State - Darrah 138kV  Perform sag study of Scottsville - Bremo 138kV to raise the emergency rating Perform sag study of Scottsville - Bremo 138kV to raise the emergency rating Perform sag study of Otter Switch - Altavista 138kV to raise the emergency	h1020			
the emergency rating  Rebuild an 0.065 mile section of the New Carlisle - Olive 138 kV line and change the 138 kV line switches at New Carlisle  Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating Perform sag studies to raise the emergency rating of Amos - Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  AEP (100%)  Perform sag studies to raise the emergency rating of Kenova - South Point 138kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  AEP (100%)  Perform sag study of Scottsville - Bremo 138kV to raise the emergency rating emergenc	01039	<u> </u>		
Rebuild an 0.065 mile section of the New Carlisle — Olive 138 kV line and change the 138 kV line switches at New Carlisle — Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating — AEP (100%)  Perform sag studies to raise the emergency rating of Amos – Poca 138kV — AEP (100%)  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV — AEP (100%)  Perform sag studies to raise the emergency rating of Kenova — South Point 138kV — AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV — AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV — AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV — AEP (100%)  Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating MEP (100%)  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency		1 1		AED (1000/)
section of the New Carlisle  Olive 138 kV line and change the 138 kV line switches at New Carlisle  Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating  Perform sag studies to raise the emergency rating of Amos - Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Kenova - South Point 138kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  AEP (100%)  Perform sag study of Scottsville - Bremo 138kV to raise the emergency rating mag study of Scottsville - Bremo 138kV to raise the emergency rating Switch - Altavista 138kV to raise the emergency				AEF (100%)
b1040 - Olive 138 kV line and change the 138 kV line switches at New Carlisle  Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating  Perform sag studies to raise the emergency rating of Amos - Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Kenova - South Point 138kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  AEP (100%)  Perform sag study of Scottsville - Bremo 138kV to raise the emergency rating AEP (100%)  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency				
change the 138 kV line switches at New Carlisle  Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating  Perform sag studies to raise the emergency rating of Amos - Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  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  Perform sag study of Scottsville - Bremo 138kV  to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV  to raise the emergency Switch - Altavista 138kV  to raise the emergency Switch - Altavista 138kV  to raise the emergency	h1040			
switches at New Carlisle  Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating  Perform sag studies to raise the emergency rating of Amos - Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  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  Perform sag study of Scottsville - Bremo 138kV  to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV  to raise the emergency Switch - Altavista 138kV  to raise the emergency	01040			
Perform a sag study for the Moseley - Roanoke 138 kV to increase the emergency rating  Perform sag studies to raise the emergency rating of Amos – Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Kenova – South Point 138kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  Perform sag studies of Tri State - Darrah 138 kV  Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency		, ,		AED (1000/)
b1041 Moseley - Roanoke 138 kV to increase the emergency rating  Perform sag studies to raise the emergency rating of Amos – Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Kenova – South Point 138kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating MEP (100%)  Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating AEP (100%)  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency				AEP (100%)
to increase the emergency rating  Perform sag studies to raise the emergency rating of Amos – Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Kenova – South Point 138kV  Deform sag studies of Tri State - Darrah 138 kV  Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency				
rating AEP (100%)  Perform sag studies to raise the emergency rating of Amos – Poca 138kV AEP (100%)  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV AEP (100%)  Perform sag studies to raise the emergency rating of Kenova – South Point 138kV AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV AEP (100%)  Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating AEP (100%)  Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating AEP (100%)  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency	b1041	1		
Perform sag studies to raise the emergency rating of Amos – Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Kenova – South Point 138kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  Perform sag study of Scottsville – Bremo 138kV  to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV  to raise the emergency row AEP (100%)  Perform sag study of Otter Switch - Altavista 138kV  to raise the emergency				A ED (1000/)
b1042 the emergency rating of Amos – Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  AEP (100%)  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  Perform sag study of Scottsville – Bremo 138kV  to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV  to raise the emergency				AEP (100%)
Amos – Poca 138kV  Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Kenova — South Point 138kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  AEP (100%)  Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency	1.10.40			
b1043 Perform sag studies to raise the emergency rating of Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Kenova — South Point 138kV  B1045 Perform sag studies of Tri State - Darrah 138 kV  Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency	61042			A FID (1000()
b1043 the emergency rating of Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Kenova — South Point 138kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  AEP (100%)  Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency				AEP (100%)
Turner - Ruth 138kV  Perform sag studies to raise the emergency rating of Kenova — South Point 138kV  AEP (100%)  Perform sag studies of Tri State - Darrah 138 kV  Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency		<u> </u>		
b1044 Perform sag studies to raise the emergency rating of Kenova — South Point 138kV  b1045 Perform sag studies of Tri State - Darrah 138 kV  Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency	b1043			A 777 (400a)
the emergency rating of Kenova — South Point 138kV  b1045  Perform sag studies of Tri State - Darrah 138 kV  Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency				AEP (100%)
Kenova — South Point 138kV  Perform sag studies of Tri State - Darrah 138 kV  AEP (100%)  Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency				
Kenova — South Point 138kV  Berform sag studies of Tri State - Darrah 138 kV  Perform sag study of Scottsville — Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency	b1044			
b1045 Perform sag studies of Tri State - Darrah 138 kV  Perform sag study of Scottsville - Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency	010			
b1045 State - Darrah 138 kV  Perform sag study of Scottsville - Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency				AEP (100%)
Barrah 138 kV  Perform sag study of Scottsville – Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency	h1045			
b1046  Scottsville – Bremo 138kV to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency	01013	State - Darrah 138 kV		AEP (100%)
b1046 to raise the emergency rating AEP (100%)  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency				
to raise the emergency rating  Perform sag study of Otter Switch - Altavista 138kV to raise the emergency	h1046	Scottsville – Bremo 138kV		
b1047 Perform sag study of Otter Switch - Altavista 138kV to raise the emergency	01040			
b1047 Switch - Altavista 138kV to raise the emergency		<u> </u>		AEP (100%)
to raise the emergency				
to raise the emergency	h1047			
rating AEP (100%)	0104/	to raise the emergency		
		rating		AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

1		T	(4)
	Reconductor the Bixby - Three C - Groves and		
b1048	Bixby - Groves 138 kV		
	tower line		AED (1000/)
			AEP (100%)
	Upgrade the risers at the		
1 10 10	Riverside station to		
b1049	increase the rating of		
	Benton Harbor – Riverside		
	138kV		AEP (100%)
	Rebuilding and reconductor		
b1050	the Bixby - Pickerington		
01030	Road - West Lancaster 138		
	kV line		AEP (100%)
	Perform a sag study for the		
	Kenzie Creek – Pokagon		
b1051	138 kV line and perform		
01031	the required work to		
	improve the emergency		
	rating		AEP (100%)
	Unsix-wire the existing		
b1052	Hyatt - Sawmill 138 kV		
01052	line to form two Hyatt -		
	Sawmill 138 kV circuits		AEP (100%)
	Perform a sag study and		, , , , , , , , , , , , , , , , , , , ,
1.1052	remediation of 32 miles		
b1053	between Claytor and Matt		
	Funk.		AEP (100%)
	Add 28.8 MVAR 138 kV		` '
	capacitor bank at Huffman		
1.1001	and 43.2 MVAR 138 kV		
b1091	Bank at Jubal Early and		
	52.8 MVAR 138 kV Bank		
	at Progress Park Stations		AEP (100%)
		1	, ,

<sup>\*</sup> Neptune Regional Transmission System, LLC

required	Tansinission Emancements	Annual Revenue Requiremen	it Responsible Customer(s)
	Add 28.8 MVAR 138 kV		
	capacitor bank at Sullivan		
b1092	Gardens and 52.8 MVAR		
	138 kV Bank at Reedy		
	Creek Stations		AEP (100%)
	Add a 43.2 MVAR		
b1093	capacitor bank at the		
01093	Morgan Fork 138 kV		
	Station		AEP (100%)
	Add a 64.8 MVAR		
b1094	capacitor bank at the West		
	Huntington 138 kV Station		AEP (100%)
b1108	Replace Ohio Central 138		
01108	kV breaker 'C2'		AEP (100%)
b1109	Replace Ohio Central 138		
01109	kV breaker 'D1'		AEP (100%)
1.1110	Replace Sporn A 138 kV		
b1110	breaker 'J'		AEP (100%)
L1111	Replace Sporn A 138 kV		
b1111	breaker 'J2'		AEP (100%)
L1112	Replace Sporn A 138 kV		
b1112	breaker 'L'		AEP (100%)
1 1 1 1 2	Replace Sporn A 138 kV		
b1113	breaker 'L1'		AEP (100%)
1 1 1 1 4	Replace Sporn A 138 kV		· ,
b1114	breaker 'L2'		AEP (100%)
1 1 1 1 7	Replace Sporn A 138 kV		. ,
b1115	breaker 'N'		AEP (100%)
1 1 1 1 6	Replace Sporn A 138 kV		. /
b1116	breaker 'N2'		AEP (100%)
	Perform a sag study on		. /
b1227	Altavista – Leesville 138		
	kV circuit		AEP (100%)
<b>₩ NT</b> 4	D 1 1 T 1 C 4		` '

<sup>\*</sup> Neptune Regional Transmission System, LLC

1100		Tesponsible Customer(s)
	Replace the existing 138/69-	
	12 kV transformer at West	
b1231	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	
01373	breaker 'T'	AEP (100%)
b1376	Replace Roanoke 138 kV	
01370	breaker 'E'	AEP (100%)
1 1277	Replace Roanoke 138 kV	
b1377	breaker 'F'	AEP (100%)
1.1070	Replace Roanoke 138 kV	
b1378	breaker 'G'	AEP (100%)
1.1070	Replace Roanoke 138 kV	
b1379	breaker 'B'	AEP (100%)
1.1200	Replace Roanoke 138 kV	
b1380	breaker 'A'	AEP (100%)
	Replace Olive 345 kV	
b1381	breaker 'E'	AEP (100%)
1.1202	Replace Olive 345 kV	
b1382	breaker 'R2'	AEP (100%)
	Perform a sag study on the	
1111	Desoto – Deer Creek 138 kV	
b1416	line to increase the	
	emergency rating	AEP (100%)
	Perform a sag study on the	
1 1 415	Delaware – Madison 138 kV	
b1417	line to increase the	
	emergency rating	AEP (100%)
	Perform a sag study on the	
1 1 4 1 0	Rockhill – East Lima 138 kV	
b1418	line to increase the	
	emergency rating	AEP (100%)
	<u> </u>	` /

<sup>\*</sup> Neptune Regional Transmission System, LLC

_		Thiadi Revenue Requirement	responsible editioner(s)
	Perform a sag study on the		
b1419	Findlay Center – Fostoria Ctl		
	138 kV line to increase the		177 (1001)
	emergency rating		AEP (100%)
	A sag study will be required		
	to increase the emergency		
	rating for this line.		
b1420	Depending on the outcome of		
	this study, more action may		
	be required in order to		
	increase the rating		AEP (100%)
	Perform a sag study on the		
b1421	Sorenson – McKinley 138 kV		
01121	line to increase the		
	emergency rating		AEP (100%)
	Perform a sag study on John		
	Amos – St. Albans 138 kV		
b1422	line to allow for operation up		
	to its conductor emergency		
	rating		AEP (100%)
	A sag study will be performed		
	on the Chemical – Capitol		
b1423	Hill 138 kV line to determine		
	if the emergency rating can be		
	utilized		AEP (100%)
	Perform a sag study for		
b1424	Benton Harbor – West Street		
01121	– Hartford 138 kV line to		
	improve the emergency rating		AEP (100%)
	Perform a sag study for the		
	East Monument – East		
b1425	Danville 138 kV line to allow		
01723	for operation up to the		
	conductor's maximum		
	operating temperature		AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Annual Revenue Requirement Required Transmission Enhancements Responsible Customer(s) Perform a sag study for the Reusens – Graves 138 kV line to allow for operation up to b1426 the conductor's maximum operating temperature AEP (100%) Perform a sag study on Smith Mountain - Leesville -Altavista – Otter 138 kV and b1427 on Boones – Forest – New London – JohnsMT – Otter AEP (100%) Perform a sag study on Smith Mountain – Candlers b1428 Mountain 138 kV and Joshua Falls – Cloverdale 765 kV to allow for operation up to AEP (100%) Perform a sag study on Fremont – Clinch River 138 kV to allow for operation up b1429 to its conductor emergency ratings AEP (100%) Install a new 138 kV circuit breaker at Benton Harbor b1430 station and move the load from Watervliet 34.5 kV station to West street 138 kV AEP (100%) Perform a sag study on the Kenova – Tri State 138 kV line to allow for operation up b1432 to their conductor emergency rating AEP (100%) Replace risers in the West **Huntington Station to** increase the line ratings b1433 which would eliminate the overloads for the contingencies listed

AEP (100%)

Annual Revenue Requirement Required Transmission Enhancements Responsible Customer(s) Perform a sag study on the line from Desoto to Madison. b1434 Replace bus and risers at Daleville station and replace bus and risers at Madison AEP (100%) Replace the 2870 MCM b1435 ACSR riser at the Sporn station AEP (100%) Perform a sag study on the Sorenson – Illinois Road 138 kV line to increase the b1436 emergency MOT for this line. Replace bus and risers at Illinois Road AEP (100%) Perform sag study on Rock Cr. – Hummel Cr. 138 kV to increase the emergency MOT for the line, replace bus and b1437 risers at Huntington J., and replace relays for Hummel Cr. - Hunt - Soren. Line at Soren AEP (100%) Replacement of risers at McKinley and Industrial Park stations and performance of a sag study for the 4.53 miles of b1438 795 ACSR section is expected to improve the Summer Emergency rating to 335 MVA AEP (100%) By replacing the risers at Lincoln both the Summar b1439 Normal and Summer Emergency ratings will improve to 268 MVA AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required	Transmission Emiancements	Annual Revenue Requirement	responsible Customer(s)
	By replacing the breakers at		
b1440	Lincoln the Summer		
01440	Emergency rating will		
	improve to 251 MVA		AEP (100%)
	Replacement of risers at		
	South Side and performance		
	of a sag study for the 1.91		
b1441	miles of 795 ACSR section is		
	expected to improve the		
	Summer Emergency rating to		
	335 MVA		AEP (100%)
	Replacement of 954 ACSR		
	conductor with 1033 ACSR		
b1442	and performance of a sag		
01442	study for the 4.54 miles of 2-		
	636 ACSR section is		
	expected		AEP (100%)
	Station work at Thelma and		
b1443	Busseyville Stations will be		
01443	performed to replace bus and		
	risers		AEP (100%)
	Perform electrical clearance		
	studies on Clinch River –		
b1444	Clinchfield 139 kV line		
01444	(a.k.a. sag studies) to		
	determine if the emergency		
	ratings can be utilized		AEP (100%)
	Perform a sag study on the		
	Addison (Buckeye CO-OP) –		
b1445	Thinever and North Crown		
	City – Thivener 138 kV sag		
	study and switch		AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Emancements	Annual Revenue Requirement	responsible customer(s)
	Perform a sag study on the		
b1446	Parkersburg (Allegheny		
	Power) – Belpre (AEP) 138		AED (1000()
	kV		AEP (100%)
b1447	Dexter – Elliot tap 138 kV		
	sag check		AEP (100%)
b1448	Dexter – Meigs 138 kV		
01110	Electrical Clearance Study		AEP (100%)
b1449	Meigs tap – Rutland 138 kV		
01777	sag check		AEP (100%)
	Muskingum – North		
b1450	Muskingum 138 kV sag		
	check		AEP (100%)
b1451	North Newark – Sharp Road		
01431	138 kV sag check		AEP (100%)
b1452	North Zanesville – Zanesville	e	
01432	138 kV sag check		AEP (100%)
	North Zanesville – Powelson		
b1453	and Ohio Central – Powelson	ı	
	138 kV sag check		AEP (100%)
	Perform an electrical		
	clearance study on the Ross -	-	
b1454	Delano – Scioto Trail 138 kV	7	
01434	line to determine if the		
	emergency rating can be		
	utilized		AEP (100%)
	Perform a sag check on the		
	Sunny – Canton Central –		
b1455	Wagenhals 138 kV line to		
01433	determine if all circuits can b	e	
	operated at their summer		
	emergency rating		AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

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

AEP (100%)

Cadiz 138 kV and Tidd 138

b1462

<sup>\*</sup> Neptune Regional Transmission System, LLC

1	Reconductor the Bexley –	illidal Revenue Requireme	Responsible Customer(s)
b1463	Groves 138 kV circuit		AEP (100%)
b1464	Corner 138 kV upgrades		
01101	corner 150 K + upgrades		AEP (100%)
			AEC (0.71%) / AEP (75.06%) /
			APS (1.25%) / BGE (1.81%) /
			ComEd (5.91%) / Dayton (0.86%)
	Add a 3rd 2250 MVA		/ DL (1.23%) / DPL (0.95%) /
b1465.1	765/345 kV transformer at		Dominion (3.89%) / JCPL
	Sullivan station		(1.58%) / NEPTUNE (0.15%) /
			HTP (0.07%) / PECO (2.08%) /
			PEPCO (1.66%) / ECP (0.07%)**
			/ PSEG (2.62%) / RE (0.10%)
	Replace the 100 MVAR 765 kV shunt reactor bank on		<b>Load-Ratio Share Allocation:</b>
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %) /
			BGE (4 <del>.23</del> 4.36%) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL (2.582.65%) / Dominion
b1465.2	Rockport – Jefferson 765 kV		( <del>12.56</del> <u>13.03</u> %) / EKPC
	line with a 300 MVAR bank		( <del>1.941.77</del> %) / JCPL ( <del>3.823.84</del> %) /
	at Rockport Station		ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%)
			/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			(3.903.82%) / PPL (5.004.72%) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			<b>DFAX Allocation:</b>
			AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

	Required T	Fransmission Enhancements Annual Revenue Requirement Responsible Customer(s)			
			Load-Ratio Share Allocation:		
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP		
			( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /		
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE		
			( <del>4.23</del> <u>4.36</u> %) / ComEd		
			( <del>13.20</del> <u>13.14</u> %) / Dayton		
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /		
		Transpose the Rockport –	DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %)		
	b1465.3	Sullivan 765 kV line and the	/ Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC		
	01103.3	Rockport – Jefferson 765	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /		
		kV line	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*		
			( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%) /		
			PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC		
			( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%) /		
			PPL ( <del>5.004.72</del> %) / PSEG		
			( <del>6.15<u>6.21</u>%) / RE (<del>0.25</del><u>0.26</u>%)</del>		
			DFAX Allocation:		
			AEP (100%)		
ı			Load-Ratio Share Allocation:		
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP		
			(14.1814.04%) / APS (6.055.61%) /		
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE ( <u>4.23</u> 4.36%) / ComEd		
			( <del>4.23</del> 4.30%) / Comed ( <del>13.20</del> 13.14%) / Dayton		
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /		
		Make switching	DL ( <del>1.68</del> 1.73%) / DPL ( <del>2.58</del> 2.65%)		
		improvements at Sullivan	/ Dominion ( <del>12.56</del> 13.03%) / EKPC		
	b1465.4	and Jefferson 765 kV	( <del>1.941.77</del> %)/JCPL( <del>3.823.84</del> %)/		
		stations	ME ( <del>1.88</del> 1.93%) / NEPTUNE*		
		Stations	( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%) /		
			PECO ( <del>5.31</del> 5.29%) / PENELEC		
			( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%) /		
			PPL ( <del>5.004.72</del> %) / PSEG		
			( <del>6.15</del> 6.21%) / RE ( <del>0.25</del> 0.26%)		
			DFAX Allocation:		
			AEP (100%)		
		Create an in and out loop at			
	h1166 1	Adams Station by removing	AEP (100%)		
	b1466.1	Additis Station by Tellioving	71L1 (10070)		

	the hard tap that currently exists	
b1466.2	Upgrade the Adams transformer to 90 MVA	AEP (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) At Seaman Station install a b1466.3 new 138 kV bus and two new 138 kV circuit breakers AEP (100%) Convert South Central Cob1466.4 op's New Market 69 kV Station to 138 kV AEP (100%) The Seaman – Highland circuit is already built to 138 kV, but is currently b1466.5 operating at 69 kV, which would now increase to 138 kV AEP (100%) At Highland Station, install a new 138 kV bus, three new 138 kV circuit breakers b1466.6 and a new 138/69 kV 90 MVA transformer AEP (100%) Using one of the bays at Highland, build a 138 kV circuit from Hillsboro b1466.7 Highland 138 kV, which is approximately 3 miles AEP (100%) Install a 14.4 MVAr b1467.1 Capacitor Bank at New **Buffalo** station AEP (100%) Reconfigure the 138 kV bus at LaPorte Junction station to eliminate a contingency b1467.2 resulting in loss of two 138 kV sources serving the LaPorte area AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 1	ransmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
	Expand Selma Parker Station		
b1468.1	and install a 138/69/34.5 kV		
	transformer		AEP (100%)
	Rebuild and convert 34.5 kV		
b1468.2	line to Winchester to 69 kV,		
	including Farmland Station		AEP (100%)
1 1 4 6 0 2	Retire the 34.5 kV line from		
b1468.3	Haymond to Selma Wire		AEP (100%)
	Conversion of the		
1 1 4 6 0 1	Newcomerstown –		
b1469.1	Cambridge 34.5 kV system		
	to 69 kV operation		AEP (100%)
	Expansion of the Derwent 69	9	
b1469.2	kV Station (including		
01409.2	reconfiguration of the 69 kV		
	system)		AEP (100%)
	Rebuild 11.8 miles of 69 kV		
1 1 4 6 0 2	line, and convert additional		
b1469.3	34.5 kV stations to 69 kV		
	operation		AEP (100%)
	Build a new 138 kV double		
1 1 470 1	circuit off the Kanawha –		
b1470.1	Bailysville #2 138 kV circui	t	
	to Skin Fork Station		AEP (100%)
1 1 470 0	Install a new 138/46 kV		
b1470.2	transformer at Skin Fork		AEP (100%)
	Replace 5 Moab's on the		•
b1470.3	Kanawha – Baileysville line		
014/0.3	with breakers at the Sundial		
	138 kV station		AEP (100%)
	Perform a sag study on the		,
	East Lima – For Lima –		
b1471	Rockhill 138 kV line to		
	increase the emergency		
	rating		AEP (100%)
-			· · · · · · · · · · · · · · · · · · ·

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required	Transmission Emiancements	Allitual Revenue Requirement	Responsible Cusionici(s)
	Perform a sag study on the		
b1472	East Lima – Haviland 138 kV		
014/2	line to increase the		
	emergency rating		AEP (100%)
	Perform a sag study on the		
	East New Concord –		
b1473	Muskingum River section of		
	the Muskingum River – West		
	Cambridge 138 kV circuit		AEP (100%)
	Perform a sag study on the		
b1474	Ohio Central – Prep Plant tap		
	138 kV circuit		AEP (100%)
	Perform a sag study on the		
b1475	S73 – North Delphos 138 kV		
01473	line to increase the		
	emergency rating		AEP (100%)
	Perform a sag study on the		
b1476	S73 – T131 138 kV line to		
	increase the emergency rating		AEP (100%)
	The Natrium – North Martin		
	138 kV circuit would need an		
b1477	electrical clearance study		
	among other equipment		177 (1001)
	upgrades		AEP (100%)
1.4.50	Upgrade Strouds Run –		
b1478	Strounds Tap 138 kV relay		A ED (1000())
	and riser		AEP (100%)
b1479	West Hebron station upgrade	s	A FID (1000()
			AEP (100%)
	Perform upgrades and a sag		
1 1 400	study on the Corner –		
b1480	Layman 138 kV section of th	e	
	Corner – Muskingum River		AED (1000/)
	138 kV circuit		AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

Perform a sag study on the

	-	 1
	Perform a sag study on the	
	West Lima – Eastown Road	
b1481	– Rockhill 138 kV line and	
01401	replace the 138 kV risers at	
	Rockhill station to increase	
	the emergency rating	AEP (100%)
	Perform a sag study for the	
b1482	Albion – Robison Park 138	
01462	kV line to increase its	
	emergency rating	AEP (100%)
	Sag study 1 mile of the	
	Clinch River – Saltville 138	
b1483	kV line and replace the risers	
01463	and bus at Clinch River,	
	Lebanon and Elk Garden	
	Stations	AEP (100%)
	Perform a sag study on the	
b1484	Hacienda – Harper 138 kV	
01464	line to increase the	
	emergency rating	AEP (100%)
	Perform a sag study on the	
b1485	Jackson Road - Concord	
01403	183 kV line to increase the	
	emergency rating	AEP (100%)
	The Matt Funk – Poages Mill	
b1486	– Starkey 138 kV line	
	requires	AEP (100%)
	Perform a sag study on the	
b1487	New Carlisle – Trail Creek	
01467	138 kV line to increase the	
	emergency rating	AEP (100%)
	Perform a sag study on the	
b1488	Olive – LaPorte Junction 138	
01400	kV line to increase the	
	emergency rating	AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

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%)	rtequirea i	Tansimosion Emianecinents 7 mil	idai ite vende itequirement	responsible editioners
b1490.1 Chadwick 138 kV line to determine if a higher emergency rating can be used  b1490.1 Establish a new 138/69 kV Butler Center station  Build a new 14 mile 138 kV line from Auburn station to Woods Road station VIA Butler Center station  Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/69 kV transformer  Improve the switching arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to increase its emergency abeliance in the solida – Bellefonte 138 kV line to increase its emergency abeliance in the solida – Bellefonte 138 kV line to increase its emergency abeliance in the solida – Bellefonte 138 kV line to increase its emergency abeliance in the solida – Bellefonte 138 kV line to		A sag study must be performed		
determine if a higher   emergency rating can be used		for the 5.40 mile Tristate –		
Establish a new 138/69 kV   Butler Center station	b1489	Chadwick 138 kV line to		
Establish a new 138/69 kV   Butler Center station   Build a new 14 mile 138 kV		determine if a higher		
Butler Center station		emergency rating can be used		AEP (100%)
Butler Center station	h1400 1	Establish a new 138/69 kV		
b1490.2   line from Auburn station to Woods Road station VIA Butler Center station	01490.1	Butler Center station		AEP (100%)
Solution   September   Septe		Build a new 14 mile 138 kV		
Woods Road station VIA Butler Center station Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer  Improve the switching arrangement at Kendallville station Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy — Busseyville 138 kV line Reconductor 0.65 miles of the Glen Lyn — Wythe 138 kV line with 3 — 1590 ACSR Perform a sag study for the Bellfonte — Grantston 138 kV line to increase its emergency rating Perform a sag study for the North Proctorville — Solida — Bellefonte 138 kV line to	h1400 2	line from Auburn station to		
Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer  Improve the switching arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	01490.2	Woods Road station VIA		
b1490.3		Butler Center station		AEP (100%)
Auburn station with a 90 MVA 138/96 kV transformer  Improve the switching arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		Replace the existing 40 MVA		
Auburn station with a 90 MVA 138/96 kV transformer  Improve the switching arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	h1400 3			
Improve the switching arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	01490.3	Auburn station with a 90 MVA		
b1490.4 arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  B1491 Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		138/96 kV transformer		AEP (100%)
Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		Improve the switching		
Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	b1490.4	arrangement at Kendallville		
Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		station		AEP (100%)
b1491 stations and perform a sag study for the Big Sandy — Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn — Wythe 138 kV line with 3 — 1590 ACSR  Perform a sag study for the Bellfonte — Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville — Solida — Bellefonte 138 kV line to		Replace bus and risers at		
study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		Thelma and Busseyville		
Busseyville 138 kV line Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	b1491			
Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to				
b1492 Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		Busseyville 138 kV line		AEP (100%)
with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		Reconductor 0.65 miles of the		
b1493 Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating AEP (100%)  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	b1492	Glen Lyn – Wythe 138 kV line		
b1493 Bellfonte – Grantston 138 kV line to increase its emergency rating AEP (100%)  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to				AEP (100%)
line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to  AEP (100%)				
b1494 Inne to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	h1/103	Bellfonte – Grantston 138 kV		
Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	01473			
b1494 North Proctorville – Solida – Bellefonte 138 kV line to				AEP (100%)
Bellefonte 138 kV line to				
Bellefonte 138 kV line to	h1/19/1			
increase its emergency rating AEP (100%)	01 <del>424</del>	Bellefonte 138 kV line to		
		increase its emergency rating		AEP (100%)

Required 7	Transmission Enhancements Ann	nual 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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

required 11	ansimission Emancements	Annual Revenue Require	ment responsible customer(s)
	Reconductor the Conesville		
	East – Conesville Prep		
b1502	Plant Tap 138 kV section of		
01302	the Conesville – Ohio		
	Central to fix Reliability N-		
	1-1 thermal overloads		AEP (100%)
			AEP (93.61%) / ATSI (2.99%) /
	Establish Sorenson 345/138		ComEd (2.07%) / HTP (0.03%) /
b1659	kV station as a 765/345 kV		PENELEC (0.31%) / ECP**
	station		(0.03%) / PSEG (0.92%) / RE
			(0.04%)
h1650 1	Replace Sorenson 138 kV		
b1659.1	breaker 'L1'		AEP (100%)
b1659.2	Replace Sorenson 138 kV		
01039.2	breaker 'L2' breaker		AEP (100%)
1.1650.2	Replace Sorenson 138 kV		
b1659.3	breaker 'M1'		AEP (100%)
b1659.4	Replace Sorenson 138 kV		
01039.4	breaker 'M2'		AEP (100%)
b1659.5	Replace Sorenson 138 kV		
01039.3	breaker 'N1'		AEP (100%)
1-1650 6	Replace Sorenson 138 kV		
b1659.6	breaker 'N2'		AEP (100%)
1.1650.7	Replace Sorenson 138 kV		
b1659.7	breaker 'O1'		AEP (100%)
h1650 9	Replace Sorenson 138 kV		
b1659.8	breaker 'O2'		AEP (100%)
h1650 0	Replace Sorenson 138 kV		
b1659.9	breaker 'M'		AEP (100%)
b1659.10	Replace Sorenson 138 kV		
01039.10	breaker 'N'		AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

required 11		Tesponsione Customer(s)
b1659.11	Replace Sorenson 138 kV breaker 'O'	A ED (100%)
		AEP (100%)
b1659.12	Replace McKinley 138 kV	
	breaker 'L1'	AEP (100%)
.		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %) /
		BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK
		( <del>3.18</del> 3.23%) / DL ( <del>1.68</del> 1.73%) /
		DPL ( <del>2.582.65</del> %) / Dominion
	D . 11: 1 5 (5 13)	( <del>12.56</del> <u>13.03</u> %) / EKPC
11455010	Establish 765 kV yard at	( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%) /
b1659.13	Sorenson and install four	ME ( <del>1.881.93</del> %) / NEPTUNE*
	765 kV breakers	(0.420.45%) OVEC $(0.080.07%)$
		/ PECO ( <del>5.31</del> 5.29%) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> 3.82%)/PPL ( <del>5.004</del> .72%)/
		PSEG ( <del>6.15</del> 6.21%) / RE
		(0.250.26%)
<b>'</b>		DFAX Allocation:
		AEP ( <del>76.97</del> 75.95%) / Dayton
		( <del>10.17</del> 7.52%) / DEOK
		( <del>12.86</del> 12.77%) / EKPC (3.76%)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
		( <del>14.18<u>1</u>4.04</del> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %) /
	Build approximately 14	BGE (4.23 <u>4.36</u> %) / ComEd
	miles of 765 kV line from	( <del>13.20</del> <u>13.14</u> %) / Dayton
b1659.14		( <del>2.05</del> 2.15%) / DEOK
	existing Dumont - Marysville line	( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
	iviai ysviile iille	DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
		ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		( <del>0.42</del> 0.45/%) / OVEC ( <del>0.08</del> 0.07/%)

	/ PECO ( <del>5.31</del> 5.29%) / PENELEC
	` <del></del> ,
	( <del>1.90</del> <u>1.89</u> %) / PEPCO
	( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /
	PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
	( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	AEP ( <del>61.24</del> <u>71.06</u> %) / ATSI
	( <del>23.28</del> 15.95%) / Dayton
	( <del>5.43</del> <u>7.10</u> %) / DL ( <del>8.02</del> <u>4.84</u> %) /
	EKPC ( <del>1.78</del> 0.77%) / OVEC
	( <del>0.25</del> <u>0.28</u> %)

<sup>\*</sup>Neptune Regional Transmission System, LLC

	Required Tr	ransmission Enhancements	Annual Revenue Require	ment Responsible Customer(s)
_				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /
				ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
				( <del>4.23</del> <u>4.36</u> %) / ComEd
				( <del>13.20</del> <u>13.14</u> %) / Dayton
				( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
				DL ( <del>1.68</del> 1.73%) / DPL ( <del>2.58</del> 2.65%)
				/ Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC
		Install a 765/500 kV		( <del>1.94<u>1.77</u>%) / JCPL (<del>3.82</del><u>3.84</u>%) /</del>
	b1660	transformer at Cloverdale		ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		transformer at Cloverdare		( <del>0.42</del> 0.45) / OVEC ( <del>0.08</del> 0.07) /
				PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
				( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%) /
				PPL ( <del>5.004.72</del> %) / PSEG
			-	( <del>6.15<u>6.21</u>%</del> ) / RE ( <del>0.25</del> <u>0.26</u> %)
i				DFAX Allocation:
				ATSI (25.80%) / Dayton
				(7.12 <u>8.37</u> %) / DEOK ( <u>17.0221.94</u> %)
				/ Dominion (42.82 <u>56.40</u> %) / EKPC
				( <del>7.24</del> <u>13.29</u> %)
ı				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP ( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
				ATSI ( <del>7.92</del> 8.10%) / BGE
				(4.234.36%) / ComEd
				( <del>13.20</del> 13.14%) / Dayton
				( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
		Install a 765 kV circuit		DL ( <del>1.681.73</del> %) / DPL ( <del>2.582.65</del> %)
	b1661	breaker at Wyoming		/ Dominion ( <del>12.56</del> 13.03%) / EKPC
	01001	station		( <del>1.941.77%</del> ) / JCPL ( <del>3.82</del> 3.84%) /
		station		ME ( <del>1.881.93</del> %) / NEPTUNE*
				( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%) /
				PECO ( <del>5.31</del> 5.29%) / PENELEC
				( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%) /
				PPL ( <del>5.00</del> 4.72%) / PSEG
				( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
•				DFAX Allocation:

AEP (100%)
------------

Required T	ransmission Enhancements	Annual Revenue Requires	ment	Responsible Customer(s)
	Rebuild 4 miles of 46 kV			
b1662	line to 138 kV from			
01002	Pemberton to Cherry			
	Creek			AEP (100%)
	Circuit Breakers are			
	installed at Cherry Creek			
b1662.1	(facing Pemberton) and at			
	Pemberton (facing Tams			
	Mtn. and Cherry Creek)			AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install three 138 kV breakers at Grandview b1662.2 Station (facing Cherry Creek, Hinton, and Bradley Stations) AEP (100%) Remove Sullivan Switching b1662.3 Station (46 kV) AEP (100%) Install a new 765/138 kV transformer at Jackson Ferry b1663 substation AEP (100%) Establish a new 10 mile double circuit 138 kV line b1663.1 between Jackson Ferry and Wythe AEP (100%) **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton Install 2 765 kV circuit (<del>2.05</del>2.15%) / DEOK (<del>3.18</del>3.23%) / breakers, breaker disconnect DL (<del>1.68</del>1.73%) / DPL (<del>2.58</del>2.65%) switches and associated bus / Dominion (<del>12.56</del>13.03%) / EKPC b1663.2 work for the new 765 kV (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) / breakers, and new relays for ME (1.881.93%) / NEPTUNE\* the 765 kV breakers at (<del>0.42</del>0.45%) / OVEC (<del>0.08</del>0.07%) / Jackson's Ferry PECO (5.315.29%) / PENELEC (<del>1.90</del>1.89%) / PEPCO (<del>3.90</del>3.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)**DFAX Allocation:** AEP (100%) Install switched capacitor b1664 banks at Kenwood 138 kV stations AEP (100%) Install a second 138/69 kV b1665 transformer at Thelma

AEP (100%)

station

	Construct a single circuit 69	
h1665 1	kV line from West	
b1665.1	Paintsville to the new	
	Paintsville station	AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

required 1	Tarisinission Emiancements	Allitual Revenue Requireme	iii Responsible Customer(s)
b1665.2	Install new 7.2 MVAR, 46		
01003.2	kV bank at Kenwood Station	n	AEP (100%)
	Build an 8 breaker 138 kV		
b1666	station tapping both circuits		
01000	of the Fostoria - East Lima		
	138 kV line		AEP (90.65%) / Dayton (9.35%)
	Establish Melmore as a		
	switching station with both		
	138 kV circuits terminating		
b1667	at Melmore. Extend the		
	double circuit 138 kV line		
	from Melmore to Fremont		
	Center		AEP (100%)
b1668	Revise the capacitor setting		
01008	at Riverside 138 kV station		AEP (100%)
1.1660	Capacitor setting changes at		
b1669	Ross 138 kV stations		AEP (100%)
1.1670	Capacitor setting changes at		
b1670	Wooster 138 kV station		AEP (100%)
1.1.671	Install four 138 kV breakers		
b1671	in Danville area		AEP (100%)
1.1676	Replace Natrium 138 kV		,
b1676	breaker 'G (rehab)'		AEP (100%)
1.4.555	Replace Huntley 138 kV		
b1677	breaker '106'		AEP (100%)
1.1.650	Replace Kammer 138 kV		\/
b1678	breaker 'G'		AEP (100%)
	Replace Kammer 138 kV		(200,0)
b1679	breaker 'H'		AEP (100%)
	Replace Kammer 138 kV		(100/0)
b1680	breaker 'J'		AEP (100%)
	Replace Kammer 138 kV		(100/0)
b1681	breaker 'K'		AEP (100%)
	Replace Kammer 138 kV		(100/0)
b1682	breaker 'M'		AEP (100%)
	0.00001111		(100/0)

<sup>\*</sup>Neptune Regional Transmission System, LLC

required 1	Tarishiission Emancements	Allitual Revenue Requirement	Responsible Customer(s)
b1683	Replace Kammer 138 kV		
01003	breaker 'N'		AEP (100%)
1.1.604	Replace Clinch River 138 kV		
b1684	breaker 'E1'		AEP (100%)
1.1.605	Replace Lincoln 138 kV		
b1685	breaker 'D'		AEP (100%)
	Advance s0251.7 (Replace		
b1687	Corrid 138 kV breaker		
	'104S')		AEP (100%)
	Advance s0251.8 (Replace		
b1688	Corrid 138 kV breaker		
	'104C')		AEP (100%)
	Perform sag study on		( 22,2)
b1712.1	Altavista - Leesville 138 kV		Dominion (75.30%) / PEPCO
01,12,1	line		(24.70%)
	Rebuild the Altavista -		Dominion (75.30%) / PEPCO
b1712.2	Leesville 138 kV line		(24.70%)
	Perform a sag study of the		(2 (3 / () )
	Bluff Point - Jauy 138 kV		
b1733	line. Upgrade breaker,		
01700	wavetrap, and risers at the		
	terminal ends		AEP (100%)
	Perform a sag study of		(100,0)
	Randoph - Hodgins 138 kV		
b1734	line. Upgrade terminal		
	equipment		AEP (100%)
	Perform a sag study of R03 -		(/
b1735	Magely 138 kV line.		
	Upgrade terminal equipment		AEP (100%)
	Perform a sag study of the		( 55.5)
b1736	Industrial Park - Summit 138		
	kV line		AEP (100%)
	Sag study of		( 22.2)
1.4505	Newcomerstown - Hillview		
b1737	138 kV line. Upgrade -		
	terminal equipment		AEP (100%)
	1 1		\ /

<sup>\*</sup>Neptune Regional Transmission System, LLC

required	Transmission Enhancements	Ailluai Kevellue Kequilelliel	it Responsible Customer(s)
	Perform a sag study of the Wolf Creek - Layman 138 kV	J	
b1738	lineUpgrade terminal		
01750	equipment including a 138		
	kV breaker and wavetrap		AEP (100%)
	Perform a sag study of the		, ,
b1739	Ohio Central - West Trinway		
	138 kV line		AEP (100%)
b1741	Replace Beatty 138 kV		
01741	breaker '2C(IPP)'		AEP (100%)
b1742	Replace Beatty 138 kV		
01742	breaker '1E'		AEP (100%)
b1743	Replace Beatty 138 kV		
01713	breaker '2E'		AEP (100%)
b1744	Replace Beatty 138 kV		
01711	breaker '3C'		AEP (100%)
b1745	Replace Beatty 138 kV		
	breaker '2W'		AEP (100%)
b1746	Replace St. Claire 138 kV		A FID (1000)
	breaker '8'		AEP (100%)
b1747	Replace Cloverdale 138 kV		AED (1000()
	breaker 'C'		AEP (100%)
b1748	Replace Cloverdale 138 kV breaker 'D1'		AED (1000/)
	Install two 138kV breakers		AEP (100%)
	and two 138kV circuit		
	switchers at South Princeton		
b1780	Station and one 138kV		
01700	breaker and one 138kV		
	circuit switcher at Switchbac	k	
	Station		AEP (100%)
	Install three 138 kV breakers		, ,
b1781	and a 138kV circuit switcher		
01/81	at Trail Fork Station in		
	Pineville, WV		AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Kequileu I	ransmission Enhancements	Annual Revenue Requiremen	it Responsible Customer(s)
	Install a 46kV Moab at		
b1782	Montgomery Station facing		
01762	Carbondale (on the London	-	
	Carbondale 46 kV circuit)		AEP (100%)
	Add two 138 kV Circuit		
	Breakers and two 138 kV		
b1783	circuit switchers on the		
	Lonesome Pine - South		
	Bluefield 138 kV line		AEP (100%)
	Install a 52.8 MVAR		
b1784	capacitor bank at the Clifford	d	
	138 kV station		AEP (100%)
	Perform a sag study of 4		
b1811.1	miles of the Waterford -		
	Muskingum line		AEP (100%)
	Rebuild 0.1 miles of		
b1811.2	Waterford - Muskingum 345		
	kV with 1590 ACSR		AEP (100%)
	Reconductor the AEP portio	n	
	of the South Canton -		
	Harmon 345 kV with 954		
b1812	ACSR and upgrade terminal		
01012	equipment at South Canton.		
	Expected rating is 1800		
	MVA S/N and 1800 MVA		
	S/E		AEP (100%)
	Install (3) 345 kV circuit		
b1817	breakers at East Elkhart		
01017	station in ring bus designed		
	as a breaker and half scheme		AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

		, <u> </u>	1
	Expand the Allen station by installing a second 345/138 kV		
	transformer and adding four 138		
b1818	kV exits by cutting in the		
	Lincoln - Sterling and Milan -		
	Timber Switch 138 kV double		AEP (88.30%) / ATSI (8.86%) /
	circuit tower line		Dayton (2.84%)
	Rebuild the Robinson Park -		
	Sorenson 138 kV line corridor as		
b1819	a 345 kV double circuit line with		
	one side operated at 345 kV and		AEP (87.18%) / ATSI (10.06%) /
	one side at 138 kV		Dayton (2.76%)
	Perform a sag study for Hancock		
	- Cave Spring - Roanoke 138 kV		
	circuit to reach new SE ratings		
b1859	of 272MVA (Cave Spring-		
	Hancock), 205MVA (Cave		
	Spring-Sunscape), 245MVA		
	(ROANO2-Sunscape)		AEP (100%)
	Perform a sag study on the		
	Crooksville - Spencer Ridge		
	section (14.3 miles) of the		
b1860	Crooksville-Poston-Strouds Run		
	138 kV circuit to see if any		
	remedial action needed to reach		
	the SE rating (175MVA)		AEP (100%)
	Reconductor 0.83 miles of the		
b1861	Dale - West Canton 138 kV Tie-		
01801	line and upgrade risers at West		
	Canton 138 kV		AEP (100%)
	Perform a sag study on the Grant		
	- Greentown 138 kV circuit and		
b1862	replace the relay CT at Grant		
01002	138 kV station to see if any		
	remedial action needed to reach		
	the new ratings of 251/286MVA		AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Perform a sag study of the Kammer - Wayman SW 138 b1863 kV line to see if any remedial action needed to reach the new SE rating of 284MVA AEP (100%) Add two additional 345/138 AEP (87.22%) / APS (8.22%) / b1864.1 kV transformers at Kammer ATSI (3.52%) / DL (1.04%) Add second West Bellaire -AEP (87.22%) / APS (8.22%) / b1864.2 Brues 138 kV circuit ATSI (3.52%) / DL (1.04%) Replace Kammer 138 kV b1864.3 breaker 'E' AEP (100%) Perform a sag study on the Kanawha - Carbondale 138 b1865 kV line to see if any remedial action needed to reach the new ratings of 251/335MVA AEP (100%) Perform a sag study on the Clinch River-Lock Hart-Dorton 138kV line,increase the Relay Compliance Trip b1866 Limit at Clinch River on the C.R.-Dorton 138kV line to 310 and upgrade the risers with 1590ACSR AEP (100%) Perform a sag study on the Newcomerstown - South Coshocton 138 kV line to see b1867 if any remedial action is needed to reach the new SE rating of 179MVA AEP (100%) Perform sag study on the East Lima - new Liberty 138 b1868 kV line to see if any remedial action is needed to reach the new SE rating of 219MVA AEP (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Perform a sag study of the Ohio Central - South Coshocton 138 kV circuit to b1869 see if any remedial action needed to reach the new SE ratings of 250MVA AEP (100%) Replace the Ohio Central transformer #1 345/138/12 b1870 kV 450 MVA for a AEP (68.16%) / ATSI (25.27%) / 345/138/34.5 kV 675 MVA Dayton (3.88%) / PENELEC (1.59%) / DEOK (1.10%) transformer Perform a sag study on the Central - West Coshocton b1871 138 kV line (improving the emergency rating of this line to 254 MVA) AEP (100%) Add a 57.6 MVAr capacitor bank at East Elkhart 138 kv b1872 station in Indiana AEP (100%) Install two 138 kV circuit breakers at Cedar Creek b1873 Station and primary side circuit switcher on the 138/69/46 kV transformer AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

required	Transmission Emancements Am	idai Revende Requireme	iii Responsible Customer(s)
	Replace existing 600 Amp		
	switches, station risers and		
	increase the CT ratios associated		
b1881	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%)
	Perform a sag study on the Bluff		
	Point - Randolf 138 kV line to		
b1882	see if any remedial action needed		
	to reach the new SE rating of 255		
	MVA		AEP (100%)
	Switch the breaker position of		
b1883	transformer #1 and SW Lima at		
	East Lima 345 kV bus		AEP (100%)
	Perform a sag study on Strawton		
	station - Fisher Body - Deer		
b1884	Creek 138 kV line to see if any		
	remedial action needed to reach		
	the new SE rating of 250 MVA		AEP (100%)
	Establish a new 138/69 kV source	e	
	at Carrollton and construct two		
b1887	new 69 kV lines from Carrollton		
01007	to tie into the Dennison - Miller		
	SW 69 kV line and to East Dover	•	
	69 kV station respectively		AEP (100%)
	Install a 69 kV line breaker at		
b1888	Blue Pennant 69 kV Station		
01000	facing Bim Station and 14.4		
	MVAr capacitor bank		AEP (100%)

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	Install a 43.2 MVAR capacitor	
b1889	bank at Hinton 138 kV station	
	(APCO WV)	 AEP (100%)
	Rebuild the Ohio Central - West	
	Trinway (4.84 miles) section of	
b1901	the Academia - Ohio Central 138	
01901	kV circuit. Upgrade the Ohio	
	Central riser, Ohio Central switch	
	and the West Trinway riser	AEP (100%)
	Construct new 138/69 Michiana	
	Station near Bridgman by tapping	
b1904.1	the new Carlisle - Main Street	
	138 kV and the Bridgman -	
	Buchanan Hydro 69 kV line	AEP (100%)
	Establish a new 138/12 kV New	
b1904.2	Galien station by tapping the	
01904.2	Olive - Hickory Creek 138 kV	
	line	AEP (100%)
	Retire the existing Galien station	
	and move its distribution load to	
b1904.3	New Galien station. Retire the	
	Buchanan Hydro - New Carlisile	
	34.5 kV line	AEP (100%)
	Implement an in and out scheme	
	at Cook 69 kV by eliminating the	
b1904.4	Cook 69 kV tap point and by	
	installing two new 69 kV circuit	
	breakers	AEP (100%)
	Rebuild the Bridgman - Cook 69	
b1904.5	kV and the Derby - Cook 69 kV	
	lines	AEP (100%)
h1046	Perform a sag study on the Brues	
b1946	– West Bellaire 138 kV line	AEP (100%)
	A sag study of the Dequine -	
h1047	Meadowlake 345 kV line #1 line	
b1947	may improve the emergency	
	rating to 1400 MVA	AEP (100%)
-		

<sup>\*</sup>Neptune Regional Transmission System, LLC

	Establish a new 765/345	1	1
	interconnection at Sporn.		
	Install a 765/345 kV		
b1948	transformer at Mountaineer		ATSI (61.08%) / DL (21.87%) /
	and build 34 mile of 345 kV to		Dominion (13.97%) / PENELEC
			` ,
	Sporn		(3.08%)
	Perform a sag study on the		
b1949	Grant Tap – Deer Creek 138		
	kV line and replace bus and		. —
	risers at Deer Creek station		AEP (100%)
	Perform a sag study on the		
b1950	Kammer – Ormet 138 kV line		
	of the conductor section		AEP (100%)
	Perform a sag study of the		
b1951	Maddox- Convoy 345 kV line		
01931	to improve the emergency		
	rating to 1400 MVA		AEP (100%)
	Perform a sag study of the		
1-1050	Maddox – T130 345 kV line		
b1952	to improve the emergency		
	rating to 1400 MVA		AEP (100%)
	Perform a sag study of the		` ,
	Meadowlake - Olive 345 kV		
b1953	line to improve the		
01700	emergency rating to 1400		
	MVA		AEP (100%)
	Perform a sag study on the		1111 (10070)
	Milan - Harper 138 kV line		
b1954	and replace bus and switches		
	at Milan Switch station		AEP (100%)
	Perform a sag study of the R-		ALI (100%)
	049 - Tillman 138 kV line		
b1955			
	may improve the emergency		A F.D. (1000( )
	rating to 245 MVA		AEP (100%)

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (<del>3.18</del>3.23%) / DL (<del>1.68</del>1.73%) / DPL (<del>2.58</del>2.65%) / Dominion Add four 765 kV breakers at b1962 (<del>12.56</del>13.03%) / EKPC Kammer (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) / ME (1.881.93%) / NEPTUNE\* (<del>0.42</del>0.45%) / OVEC (<del>0.08</del>0.07%) / PECO (<del>5.31</del><u>5.29</u>%) / PENELEC (<del>1.90</del>1.89%) / PEPCO (<del>3.90</del>3.82%) / PPL (<del>5.004</del>.72%) / PSEG (<del>6.15</del>6.21%) / RE (<del>0.25</del>0.26%) **DFAX Allocation:** AEP (100%) Build approximately 1 mile of circuit comprising of 2-954 b1963 ACSR to get the rating of Waterford-Muskinum 345 kV higher AEP (100%) APS (33.51%) / ATSI (32.21%) / DL (18.64%) / Dominion (6.01%) / Reconductor 13 miles of the ECP\*\* (0.10%) / HTP (0.11%) / b1970 Kammer – West Bellaire JCPL (1.68%) / Neptune\* (0.18%) 345kV circuit / PENELEC (4.58%) / PSEG (2.87%) / RE (0.11%) Perform a sag study to improve the emergency rating b1971 on the Bridgville -Chandlersville 138 kV line AEP (100%) Replace disconnect switch on b1972 the South Canton 765/345 kV transformer AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Perform a sag study to improve the emergency b1973 rating on the Carrollton – Sunnyside 138 kV line AEP (100%) Perform a sag study to improve the emergency b1974 rating on the Bethel Church -West Dover 138 kV line AEP (100%) Replace a switch at South b1975 Millersburg switch station AEP (100%) ATSI (37.04%) / AEP (34.35%) / DL (10.41%) / Dominion (6.19%) Reconductor or rebuild / APS (3.94%) / PENELEC Sporn - Waterford b2017 (3.09%) / JCPL (1.39%) / Dayton Muskingum River 345 kV (1.20%) / Neptune\* (0.14%) / line HTP (0.09%) / ECP\*\* (0.08%) / PSEG (2.00%) / RE (0.08%) ATSI (58.58%) / AEP (14.16%) / APS (12.88%) / DL (7.93%) / Loop Conesville - Bixby 345 b2018 kV circuit into Ohio Central PENELEC (5.73%) / Dayton (0.72%)AEP (93.74%) / APS (4.40%) / Establish Burger 345/138 kV b2019 DL (1.11%) / ATSI (0.74%) / station PENELEC (0.01%) AEP (88.39%) / APS (7.12%) / Rebuild Amos - Kanawah b2020 ATSI (2.89%) / DEOK (1.58%) / River 138 kV corridor PEPCO (0.02%) AEP (91.92%) / DEOK (3.60%) / Add 345/138 transformer at APS (2.19%) / ATSI (1.14%) / b2021 Sporn, Kanawah River & DL (1.08%) / PEPCO (0.04%) / Muskingum River stations BGE (0.03%) Replace Kanawah 138 kV b2021.1 breaker 'L' AEP (100%) Replace Muskingum 138 kV b2021.2 breaker 'HG' AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

1 1 1		 it Responsible Editorier(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 Spor	AEP (97.99%) / DEOK (2.01%)
b2027	Perform a sag study of the Tidd - Collier 345 kV line	AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	
	Perform a sag study on East		
b2028	Lima - North Woodcock 138		
	kV line to improve the rating		AEP (100%)
	Perform a sag study on		
b2029	Bluebell - Canton Central 138		
	kV line to improve the rating		AEP (100%)
b2030	Install 345 kV circuit		
02030	breakers at West Bellaire		AEP (100%)
	Sag study on Tilton - W.		
b2031	Bellaire section 1 (795		
	ACSR), about 12 miles		AEP (100%)
1.0020	Rebuild 138 kV Elliot tap -		ATSI (73.02%) / Dayton
b2032	Poston line		(19.39%) / DL (7.59%)
	Perform a sag study of the		
b2033	Brues - W. Bellaire 138 kV		
	line		AEP (100%)
	Adjust tap settings for		
b2046	Muskingum River		
	transformers		AEP (100%)
1.00.47	D 1 1 (C 1		. ,
b2047	Replace relay at Greenlawn		AEP (100%)
	Replace both 345/138 kV		
b2048	transformers with one bigger		
	transformer		AEP (92.49%) / Dayton (7.51%)
b2049	Replace relay		
02047	Replace lefay		AEP (100%)
b2050	Perform sag study		
02030			AEP (100%)
	Install 3 138 kV breakers and		
b2051	a circuit switcher at Dorton		
	station		AEP (100%)
			AEP (67.17%) / ATSI (27.37%) /
b2052	Replace transformer		Dayton (3.73%) / PENELEC
			(1.73%)
b2054	Perform a sag study of Sporn		
02054	- Rutland 138 kV line		AEP (100%)
	· ·	1	

<sup>\*</sup>Neptune Regional Transmission System, LLC

required		Allituat Keveriue Kequiteriletit	Responsible Customer(s)
1.00.00	Replace George Washington		
b2069	138 kV breaker 'A' with 63kA		
	rated breaker		AEP (100%)
	Replace Harrison 138 kV		
b2070	breaker '6C' with 63kA rated		
	breaker		AEP (100%)
	Replace Lincoln 138 kV		
b2071	breaker 'L' with 63kA rated		
	breaker		AEP (100%)
	Replace Natrum 138 kV		
b2072	breaker 'I' with 63kA rated		
	breaker		AEP (100%)
	Replace Darrah 138 kV		
b2073	breaker 'B' with 63kA rated		
	breaker		AEP (100%)
	Replace Wyoming 138 kV		
b2074	breaker 'G' with 80kA rated		
	breaker		AEP (100%)
	Replace Wyoming 138 kV		(/
b2075	breaker 'G1' with 80kA rated		
	breaker		AEP (100%)
	Replace Wyoming 138 kV		1121 (100,0)
b2076	breaker 'G2' with 80kA rated		
02070	breaker		AEP (100%)
	Replace Wyoming 138 kV		1111 (10070)
b2077	breaker 'H' with 80kA rated		
02077	breaker		AEP (100%)
	Replace Wyoming 138 kV		1111 (10070)
b2078	breaker 'H1' with 80kA rated		
02070	breaker		AEP (100%)
	Replace Wyoming 138 kV	+	1111 (10070)
b2079	breaker 'H2' with 80kA rated		
02017	breaker		AEP (100%)
	Replace Wyoming 138 kV		71L1 (10070)
b2080	breaker 'J' with 80kA rated		
02000	breaker J with soka rated		AED (1000/)
	Dieaker		AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Wyoming 138 kV b2081 breaker 'J1' with 80kA rated breaker AEP (100%) Replace Wyoming 138 kV breaker 'J2' with 80kA rated b2082 breaker AEP (100%) Replace Natrum 138 kV breaker 'K' with 63kA rated b2083 breaker AEP (100%) Replace Tanner Creek 345 kV breaker 'P' with 63kA b2084 rated breaker AEP (100%) Replace Tanner Creek 345 kV breaker 'P2' with 63kA b2085 rated breaker AEP (100%) Replace Tanner Creek 345 b2086 kV breaker 'Q1' with 63kA rated breaker AEP (100%) Replace South Bend 138 kV b2087 breaker 'T' with 63kA rated breaker AEP (100%) Replace Tidd 138 kV breaker b2088 'L' with 63kA rated breaker AEP (100%) Replace Tidd 138 kV breaker b2089 'M2' with 63kA rated breaker AEP (100%) Replace McKinley 138 kV breaker 'A' with 40kA rated b2090 breaker AEP (100%) Replace West Lima 138 kV b2091 breaker 'M' with 63kA rated breaker AEP (100%) Replace George Washington b2092 138 kV breaker 'B' with 63kA

AEP (100%)

rated breaker

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required	Transmission Emiancements	Annual Revenue Requiremen	it Responsible Customer(s)
	Replace Turner 138 kV		
b2093	breaker 'W' with 63kA rated		
	breaker		AEP (100%)
	Build a new 138 kV line from	n	
	Falling Branch to Merrimac		
b2135	and add a 138/69 kV		
	transformer at Merrimac		
	Station		AEP (100%)
	Add a fourth circuit breaker		
	to the station being built for		
b2160	the U4-038 project		
02100	(Conelley), rebuild U4-038 -		
	Grant Tap line as double		
	circuit tower line		AEP (100%)
	Rebuild approximately 20		
	miles of the Allen - S073		
	double circuit 138 kV line		
b2161	(with one circuit from Allen	-	
02101	Tillman - Timber Switch -		
	S073 and the other circuit		
	from Allen - T-131 - S073)		
	utilizing 1033 ACSR		AEP (100%)
	Perform a sag study to		
b2162	improve the emergency ratin	g	
02102	of the Belpre - Degussa 138		
	kV line		AEP (100%)
b2163	Replace breaker and wavetra	p	
02103	at Jay 138 kV station		AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

## **SCHEDULE 12 – APPENDIX**

## (20) Virginia Electric and Power Company

	Required Transmission Enhancements Annual Revenue Requirement*** Responsible Customer(s)				
			Load-Ratio Share Allocation:		
	b0217	Upgrade Mt. Storm - Doubs 500kV	AEC ( <del>1.72</del> <u>1.71</u> %) / AEP		
			( <del>14.18</del> <u>14.04</u> %) / APS		
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)		
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd		
			( <del>13.20</del> <u>13.14</u> %) / Dayton		
			( <del>2.05</del> <u>2.15</u> %) / DEOK		
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /		
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion		
			( <del>12.56</del> <u>13.03</u> %) / EKPC		
			( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)		
			/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*		
			( <del>0.42</del> <u>0.45</u> %) / OVEC		
			( <del>0.08</del> 0.07%) / PECO ( <del>5.31</del> 5.29%)		
			/ PENELEC ( <del>1.90</del> <u>1.89</u> %) /		
			PEPCO ( <del>3.90</del> <u>3.82</u> %) / PPL		
			( <del>5.00</del> 4.72%) / PSEG ( <del>6.15</del> 6.21%)		
			/ RE ( <del>0.25</del> <u>0.26</u> %)		
			DFAX Allocation:		
			APS ( <del>24.07</del> <u>21.37</u> %) / BGE		
			( <del>9.92</del> <u>9.63</u> %) / Dominion		
			( <del>54.43</del> <u>59.60</u> %) / PEPCO		
			( <del>11.58</del> <u>9.40</u> %)		
		Install 150 MVAR capacitor at Loudoun 500 kV	Load-Ratio Share Allocation:		
	b0222		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP		
			( <del>14.18</del> <u>14.04</u> %) / APS		
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)		
			/ BGE (4.23 <u>4.36</u> %) / ComEd		
			( <del>13.20</del> <u>13.14</u> %) / Dayton		
			( <del>2.05</del> <u>2.15</u> %) / DEOK		
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /		
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion		
			( <del>12.56</del> <u>13.03</u> %) / EKPC		
			( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)		
			/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*		
			( <del>0.42</del> <u>0.45</u> %) / OVEC		
			( <del>0.08</del> 0.07%) / PECO ( <del>5.31</del> 5.29%)		
			/ PENELEC ( <del>1.90</del> <u>1.89</u> %) /		
			PEPCO ( <del>3.90</del> <u>3.82</u> %) / PPL		
			( <del>5.004.72</del> %) / PSEG ( <del>6.15</del> <u>6.21</u> %)		
			/ RE ( <del>0.25</del> 0.26%)		

DFAX Allocation:
Dominion (91.39100%) / PEPCO
<del>(8.61%)</del>

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*\*</sup> 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.)**

b0223	Install 150 MVAR capacitor at Asburn 230 kV	Î	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%)

		A unitati Revenue Requirement Responsible Customer(s)
,		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %) /
		BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> 13.14%) / Dayton
		( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%)
		/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
	Install 500 kV breakers &	( <del>2.58</del> <u>2.65</u> %) / Dominion
b0231	500 kV bus work at	( <del>12.56</del> <u>13.03</u> %) / EKPC
00231	Suffolk	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
	Sulloik	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
		/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		Dominion (100%)
	Install 500/230 kV	
	Transformer, 230 kV	
	breakers, & 230 kV bus	
b0231.2	work at Suffolk	Dominion (100%)
	Install 150 MVAR	
b0232	capacitor at Lynnhaven	
	230 kV	Dominion (100%)
	Install 150 MVAR	
b0233	capacitor at Landstown	
	230 kV	Dominion (100%)
	Install 150 MVAR	
b0234	capacitor at Greenwich	
	230 kV	Dominion (100%)
	Install 150 MVAR	
b0235	capacitor at Fentress 230	
	kV	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required i	Fransmission Enhancements Reconductor Endless	Annual Revenue Requirement Responsible Customer(s)
b0307	Caverns – Mt. Jackson	
00307	115 kV	Dominion (100%)
	Replace L breaker and	Dominion (10070)
b0308	switches at Endless	
	Caverns 115 kV	Dominion (100%)
b0309	Install SPS at Earleys 115	` ,
00309	kV	Dominion (100%)
	Reconductor Club House	
b0310	– South Hill and Chase	
	City – South Hill 115 kV	Dominion (100%)
b0311	Reconductor Idylwood to	D (1000()
	Arlington 230 kV	Dominion (100%)
b0312	Reconductor Gallows to	D (1000()
	Ox 230 kV	Dominion (100%)
b0325	Install a 2 <sup>nd</sup> Everetts	
00323	230/115 kV transformer	Dominion (100%)
	Uprate/resag Remington-	
b0326	Brandywine-Culppr 115	
	kV	Dominion (100%)
	Build 2 <sup>nd</sup> Harrisonburg –	
b0327	Valley 230 kV	APS (19.79%) / Dominion
	valicy 250 k v	(76.18%) / PEPCO (4.03%)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
		/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK
		( <del>3.18</del> 3.23%) / DL ( <del>1.68</del> 1.73%) /
1.0220.1	Build new Meadow Brook	DPL ( <del>2.58</del> 2.65%) / Dominion
b0328.1	- Loudoun 500 kV circuit	( <del>12.56</del> 13.03%) / EKPC
	(30 of 50 miles)	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		( <del>0.42</del> 0.45)/OVEC
		( <del>0.08</del> 0.07%) / PECO ( <del>5.31</del> 5.29%)
		/ PENELEC (1.901.89%) /
		PEPCO ( <del>3.903.82</del> %) / PPL
		( <del>5.004.72</del> %) / PSEG ( <del>6.15</del> <u>6.21</u> %)
		/ RE ( <del>0.25</del> <u>0.26</u> %)

DFAX Allocation	•
Dominion (91.39100%)/	<del>PEPCO</del>
<del>(8.61%)</del>	

<sup>\*</sup> Neptune Regional Transmission System, LLC

	Required I	ransmission Enhancements A	nnual Revenue Requirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
		Ungrada Mt. Storm 500	( <del>12.56</del> <u>13.03</u> %) / EKPC
	b0328.3	Upgrade Mt. Storm 500 kV substation	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
		K V Substation	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO ( <del>5.31</del> <u>5.29</u> %)
			/ PENELEC ( <del>1.90</del> <u>1.89</u> %) /
			PEPCO ( <del>3.90</del> <u>3.82</u> %) / PPL
			( <del>5.004.72</del> %) / PSEG ( <del>6.15</del> <u>6.21</u> %)
			/ RE ( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			APS (42.5843.43%) / Dominion
			( <del>57.42</del> <u>56.57</u> %)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
		Upgrade Loudoun 500 kV substation	/ BGE (4.234.36%) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
	b0328.4		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
		substation	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO ( <del>5.31</del> <u>5.29</u> %)
$ \  $			/ PENELEC ( <del>1.90</del> <u>1.89</u> %) /
$ \  $			PEPCO ( <del>3.90</del> 3.82%) / PPL
			( <del>5.004.72</del> %) / PSEG ( <del>6.15</del> <u>6.21</u> %)
1 1			/ RE ( <del>0.25</del> <u>0.26</u> %)
l			
			DFAX Allocation:
! 			DFAX Allocation: Dominion (91.39100%)-/ PEPCO (8.61%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

1		Tamada Tevende Tecquirente Tecsponsione Customer(8)
.		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %) /
		BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> <u>2.15</u> %) / DEOK ( <del>3.18</del> <u>3.23</u> %)
	Build Carson – Suffolk	/ DL ( <del>1.68</del> <u>1.73</u> %) / DPL
	500 kV, install 2 <sup>nd</sup> Suffolk	( <del>2.58</del> <u>2.65</u> %) / Dominion
b0329		( <del>12.56</del> <u>13.03</u> %) / EKPC
00325	build Suffolk – Fentress	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) /
	230 kV circuit	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	230 KV Clicuit	( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
		/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		Dominion (100%)
	Replace Thole Street 115	
b0329	9.1   Keplace Thole Street 113 kV breaker '48T196'	7 11 (1001)
	KV bicakci 481190	Dominion (100%)
b0329	Replace Chesapeake 115	
00325	kV breaker 'T242'	Dominion (100%)
	D 1 Cl 1 117	Dominion (10070)
b0329	Replace Chesapeake 115	
	kV breaker '8722'	Dominion (100%)
	Replace Chesapeake 115	
b0329	0.4   kV breaker '16422'	Dominion (100%)
	Install 2 <sup>nd</sup> Suffolk 500/230	Dominion (100%)
b0329	kV transformer & build	
	Suffolk – Thrasher 230	D
	kV circuit	Dominion (100%)††
1.0000	Install Crewe 115 kV	
b0330		D (1000)
	from line 158 to 98	Dominion (100%)
	Upgrade/resag Shell Bank	
b0331	`	
	165)	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>†</sup>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

required		minual 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 Dooms 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> Dooms 500/230 kV transformer addition		APS (3.35%) / BGE (4.22%) / DPL (1.10%) / Dominion (83.94%) / PEPCO (7.39%)

required 1	ransmission Emancements Ann	iuai Revenue Requiremen	
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
			ATSI ( <del>7.92<u>8.10</u>%)</del> / BGE
			(4.23 <u>4.36</u> %) / ComEd ( <del>13.20</del> <u>13.14</u> %)
			/ Dayton ( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) / DPL
			( <del>2.58</del> 2.65%) / Dominion
	Retension Pruntytown – Mt.		( <del>12.56</del> <u>13.03</u> %) / EKPC ( <del>1.94</del> <u>1.77</u> %) /
b0412	Storm 500 kV to a 3502		JCPL ( <del>3.82</del> <u>3.84</u> %) / ME ( <del>1.88</del> <u>1.93</u> %)
	MVA rating		/ NEPTUNE* ( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO ( <del>5.31</del> <u>5.29</u> %) /
			PENELEC ( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			APS ( <del>55.52</del> <u>53.81</u> %) / <u>DEOK</u>
			(17.91%)ATSI (0.01%) / PEPCO
			( <del>44.47</del> <u>28.28</u> %)
	Install 150 MVAR		
b0450	Capacitor at Fredricksburg		
	230 kV		Dominion (100%)
b0451	Install 25 MVAR Capacitor		
00131	at Somerset 115 kV		Dominion (100%)
	Install 150 MVAR		
b0452	Capacitor at Northwest 230		
	kV		Dominion (100%)
	Convert Remingtion –		APS (0.31%) / BGE (3.01%) / DPL
b0453.1	Sowego 115 kV to 230 kV		(0.04%) / Dominion (92.75%) / ME
	50 70 go 113 K 1 10 230 K V		(0.03%) / PEPCO (3.86%)
	Add Sowego – Gainsville		APS (0.31%) / BGE (3.01%) / DPL
b0453.2	230 kV		(0.04%) / Dominion (92.75%) / ME
	250 K V		(0.03%) / PEPCO (3.86%)
	Add Sowego 230/115 kV transformer		APS (0.31%) / BGE (3.01%) / DPL
b0453.3			(0.04%) / Dominion (92.75%) / ME
			(0.03%) / PEPCO (3.86%)
	Reconductor 2.4 miles of		
b0454	Newport News -		
	Chuckatuck 230 kV		Dominion (100%)
<b>₩ NT</b> 4	Pagional Transmission System	IIC	

<sup>\*</sup> Neptune Regional Transmission System, LLC

required 1	Required Transmission Educationnents — Affilial Revenue Requirement — Responsible Customer(s)			
1.0455	Add 2 <sup>nd</sup> Endless Caverns	APS (32.70%) / BGE (7.01%) / DPL		
b0455	230/115 kV transformer	(1.80%) / Dominion (50.82%) /		
		PEPCO (7.67%)		
	Reconductor 9.4 miles of	APS (33.69%) / BGE (12.18%) /		
b0456	Edinburg – Mt. Jackson 115	Dominion (40.08%) / PEPCO		
	kV	(14.05%)		
		Load-Ratio Share Allocation:		
		AEC ( <del>1.72</del> 1.71%) / AEP		
		( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /		
		ATSI ( <del>7.92</del> 8.10%) / BGE (4.234.36%)		
		/ ComEd ( <del>13.20</del> <u>13.14</u> %) / Dayton		
	Replace both wave traps on	( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /		
		DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %) /		
		Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC		
b0457		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) / ME		
00437	Dooms – Lexington 500 kV	( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*		
		( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /		
		PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC		
		( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) /		
		PPL ( <del>5.004.72</del> %) / PSEG ( <del>6.15</del> <u>6.21</u> %)		
		/ RE ( <del>0.25</del> <u>0.26</u> %)		
		DFAX Allocation:		
		<del>DEOK (5.02%) /</del> Dominion		
		( <del>92.89</del> <u>99.00</u> %) / EKPC ( <del>2.09</del> <u>1.00</u> %)		
		AEC (1.75%) / APS (19.70%) / BGE		
	Reconductor the Dickerson	(22.13%) / DPL (3.70%) / JCPL		
b0467.2	– Pleasant View 230 kV	(0.71%) / ME (2.48%) / Neptune*		
	circuit	(0.06%) / PECO (5.54%) / PEPCO		
		(41.86%) / PPL (2.07%)		

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 7	Fransmission Enhancements A	nnual Revenue Requirement Responsible Customer(s)
b0492.6	Replace Mount Storm 500 kV breaker 55072	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)  DFAX Allocation:  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	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%)  / Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) /  ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)  DFAX Allocation:  AEC (5.01%) / AEP (4.39%) / APS

	(9.26%) / BGE (4.43%) / DL
l	(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%)

	Required Tr	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE
			(4.23 <u>4.36</u> %) / ComEd ( <del>13.20</del> <u>13.14</u> %)
			/ Dayton ( <del>2.05</del> <u>2.15</u> %) / DEOK
			(3.183.23%) / DL (1.681.73%) / DPL
			( <del>2.58</del> <u>2.65</u> %) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC ( <del>1.94</del> <u>1.77</u> %) /
			JCPL ( <del>3.82</del> <u>3.84</u> %) / ME ( <del>1.88</del> <u>1.93</u> %)
		Replace Mount Storm	/ NEPTUNE* ( <del>0.42</del> <u>0.45</u> %) / OVEC
	b0492.8	500 kV breaker	( <del>0.08</del> <u>0.07</u> %) / PECO ( <del>5.31</del> <u>5.29</u> %) /
	00472.0	H1172-2	PENELEC ( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			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%)
ı			Load-Ratio Share Allocation:
			AEC ( <del>1.721.71</del> %) / AEP
			(14.1814.04%) / APS (6.055.61%) /
			ATSI (7.928.10%) / BGE
			(4.23 <u>4.36</u> %) / ComEd ( <del>13.20</del> <u>13.14</u> %)
			/ Dayton ( <del>2.05</del> 2.15%) / DEOK
		Darloss Mount Ctorns	(3.183.23%) / DL (1.681.73%) / DPL
		Replace Mount Storm 500 kV breaker	(2.582.65%) / Dominion
	b0492.9	500 kV breaker G2T550	( <del>12.56</del> <u>13.03</u> %) / EKPC ( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> 3.84%) / ME ( <del>1.88</del> 1.93%)
		G21330	\ <u> </u>
			/ NEPTUNE* ( <del>0.420.45</del> %) / OVEC ( <del>0.08</del> 0.07%) / PECO ( <del>5.31</del> 5.29%) /
			PENELEC ( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%)/PPL ( <del>5.004</del> .72%)/
			\ <u> </u>
l			PSEG (6.156.21%) / RE (0.250.26%) <b>DFAX Allocation:</b>
			AEC (5.01%) / AEP (4.39%) / APS
			(9.26%) / BGE (4.43%) / DL (0.02%)
			(9.20%) / DUE (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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Tra	ansmission Enhancements	ments Annual Revenue Requirement Responsible Customer(s)		
		Load-Ratio Share Allocation:		
			AEC ( <del>1.72</del> 1.71%) / AEP	
			( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /	
			ATSI ( <del>7.92</del> 8.10%) / BGE ( <del>4.23</del> 4.36%)	
			/ ComEd ( <del>13.20</del> 13.14%) / Dayton	
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /	
			DL ( <del>1.68</del> 1.73%) / DPL ( <del>2.58</del> 2.65%) /	
			Dominion (12.5613.03%) / EKPC	
			( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) / ME	
			( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*	
	Replace Mount		( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /	
b0492.10	Storm 500 kV		PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC	
	breaker G2T554		( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) /	
			PPL ( <del>5.00</del> 4.72%) / PSEG ( <del>6.15</del> <u>6.21</u> %)	
			/ RE ( <del>0.25</del> <u>0.26</u> %)	
			DFAX Allocation:	
			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%)	
			Load-Ratio Share Allocation:	
			AEC ( <del>1.72</del> 1.71%) / AEP	
			( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> <u>5.61</u> %) /	
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE ( <u>4.234.36</u> %)	
			/ ComEd ( <del>13.20</del> <u>13.14</u> %) / Dayton	
			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /	
			DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %) /	
			Dominion ( <del>12.56</del> <u>13.03</u> %) / EKPC	
	Replace Mount		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %) / ME	
b0492.11	Storm 500 kV		( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*	
00.72.11	breaker G1T551		( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %) /	
			PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC	
			( <del>1.901.89</del> %) / PEPCO ( <del>3.903.82</del> %) /	
			PPL ( <del>5.004.72</del> %) / PSEG ( <del>6.15</del> <u>6.21</u> %)	
			/ RE ( <del>0.25</del> <u>0.26</u> %)	
			DFAX Allocation:	
			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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

AEC (1-721.71%) / AEP			Load-Ratio Share Allocation:
ATSI (7-928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.680.07%) / PECO (5.315.29%) / PEDEO (3.903.82%) / PPL (5.004.72%) / PECO (6.11%) / PECO (14.51%) / PECO (6.11%) / PECO (6			AEC ( <del>1.721.71</del> %) / AEP
ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.483.23%) / DL (1.681.73%) / DEOK (3.483.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (1.942.56%) / DEOK (3.453.29%) / PEPCO (5.315.29%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PEPCO (3.903.82%) / PPL (6.91%) / Dominion (10.82%) / JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%) / PSEG (15.86%) / RE (0.59%) / ATSI (7.928.10%) / BGE (4.234.36%) / ATSI (7.928.10%) / BGE (4.234.36%) / DL (1.681.73%) / DPL (2.882.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.941.77%) / JCPL (3.823.84%) /		Upgrade nameplate rating of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and	( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /
C2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DEOK (3.183.23%) / DD (1.25613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (1.841.93%) / OVEC (0.080.07%) / PECO (5.315.29%) / PEDE (1.941.82%) / PECO (5.315.29%) / PEDE (1.941.82%) / PECO (3.903.82%) / PPL (5.004.72%) / PEGO (3.903.82%) / PPL (5.004.72%) / PEGO (3.903.82%) / PPL (6.91%) / DDI (6.91%) / PECO (1.151%) / PEPCO (6.118) / DDI (1.681.73%) / DBI (1.681.73%) / DBI (1.681.73%) / DBI (1.681.73%) / DEOK (1.681.73%) / D			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE ( <u>4.23</u> <u>4.36</u> %)
DL (1-681.73%) / DPL (2-582.65%) / Dominion (12-5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.942.12 SX172, G3TSX1, G1TH11, G3T572, and SX22 PL (5.004.72%) / PECO (5.315.29%) / PECO (6.180.21%) / RE (0.250.26%) / DPL (6.91%) / Dominion (10.82%) / DPL (6.91%) / Dominion (10.82%) / SEG (15.86%) / RE (0.259.26%) / DPL (6.91%) / DDM (10.02%) / DPL (6.91%) / DDM (10.02%) / DPL (6.91%) / DDM (10.92%) / DPL (6.91%) / DDM (10.82%) / SEG (15.86%) / RE (0.59%) / DPL (6.91%) / DDM (10.82%) / DPL (6.91%) / DDM (10.82%) / DPL (6.91%) / DDM (10.82%) / DPL (6.91%) / DPL (6.9			/ ComEd ( <del>13.20</del> <u>13.14</u> %) / Dayton
Dominion (12.56]3.03%) / EKPC			( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /
Upgrade nameplate rating of Mount Storm 500 kV breakers 55472, 57272, b0492.12 SX172, G3TSX1, G1TH11, G3T572, and SX22 PPL (5.345.29%) / PECO (6.156.21%) / RE (0.250.26%) PECO (6.156.21%) / PECO (6.19%) / DECO (14.51%) / PECO (11.64%) / APS (6.959%) / PECO (14.51%)			DL ( <del>1.68</del> <u>1.73</u> %) / DPL ( <del>2.58</del> <u>2.65</u> %) /
of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22    Description of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22    Description of Mount Storm 500 kV breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22    Description of Mount Storm 500 kV PEC (6.480.07%) / PEC (6.39%) / PEC (6.39%) / PEC (6.156.21%) / RE (6.250.26%)     Description of Mount Storm 500 kV breakers of 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     Description of Mount Storm 500 kV breakers of Mount Storm 500 kV breakers of Mappens o			
breakers 55472, 57272, SX172, G3TSX1, G1TH11, G3T572, and SX22    Bodd			
b0492.12   SX172, G3TSX1, G1TH11, G3T572, and SX22   PECO (\$.345.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (\$.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)     DFA Allocation: 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%)     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 Vienna and a DC line from Calvert Cliffs to Indian River   (4.481.73%) / DVEC (4.943.84%) / ME (4.941.77%) / JCPL (3.823.84%) / ME (4.941.77%) / JCPL (3.823.84%) / ME (4.941.59%) / PEPCO (5.345.29%) / PENELEC (4.991.89%) / PEPCO (3.993.82%) / PPL (5.004.72%) / PSEG (6.156.21%)			` <u> </u>
G1TH11, G3T572, and SX22  (1-901.89%)/PEPCO (3-903.82%)/PEPCO (3-903.82%)/PPL (5-004.72%) / PSEG (6.156.21%)  RE (0.250.26%)  DFAX Allocation:  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%)  AEC (1-721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7-928.10%) / BGE (4.234.36%)  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 Vienna and a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River  (1-901.89%) / PEPCO (3-903.82%) / PPCO (3-903.82%) / PPL (5-004.72%) / PSEG (6-156.21%)			\ <u> </u>
SX22   PPL (\$.004.72%) / PSEG (6.156.21%)     / RE (0.250.26%)     DFAX Allocation:     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%)     AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%)     ATSI (7.928.10%) / BGE (4.234.36%)     ATSI (7.928.10%) / BGE (4.234.36%)     Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cl	b0492.12	,	`
NEF (0.250.26%)   DFAX Allocation:     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%)     AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%)     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 Vienna and a DC   line from Calvert Cliffs to Indian River   (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%)			, <u> </u>
DFAX Allocation:   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%)     AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%)   Comed (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DPL (2.582.65%) / DOMINION (42.5613.03%) / EKPC   Line from Calvert Cliffs to Vienna and a DC (1.941.77%) / JCPL (3.823.84%) / ME (1.941.77%) / JCPL (3.823.84%) / ME (1.940.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%)		SX22	` <u> </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%)  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DEOK (3.183.23			
(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%)     AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%)   / ComEd (13.2013.14%) / Dayton 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 Cal			\
JCPL (11.64%) / ME (2.94%) / NEPTUNE (1.12%) / PECO (14.51%) / PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)     AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / Comed (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DEOK (3.183.23%) / DEOK (3.183.23%) / DEOK (3.183.23%) / DEOK (2.582.65%) / DEOK (3.183.23%)			
NEPTUNE (1.12%) / PECO (14.51%)  / PEPCO (6.11%) / PPL (6.39%) /  PSEG (15.86%) / RE (0.59%)  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%)  / ComEd (13.2013.14%) / Dayton  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  NEPTUNE (1.12%) / PECO (14.51%)  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  Domid (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) / ME  (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG (6.156.21%)			` '
PEPCO (6.11%) / PPL (6.39%) / PSEG (15.86%) / RE (0.59%)     AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%)     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			` ' ' '
BSEG (15.86%) / RE (0.59%)  AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%)  / ComEd (13.2013.14%) / Dayton  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  DECO (5.315.29%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG (6.156.21%)			\
AEC (1.721.71%) / AEP  (14.1814.04%) / APS (6.055.61%) /  ATSI (7.928.10%) / BGE (4.234.36%)  / ComEd (13.2013.14%) / Dayton  (2.052.15%) / DEOK (3.183.23%) /  DL (1.681.73%) / DPL (2.582.65%) /  Dominion (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%) / ME  (1.881.93%) / NEPTUNE*  (1.881.93%) / NEPTUNE*  (1.942.0.45%) / OVEC (0.080.07%) /  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG (6.156.21%)			` ' ' '
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  (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%)			
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  ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DDL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%)			` <del></del> /
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  MAPP Project – install / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DDL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%)			\
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    Dominion (12.5613.03%) / DEOK (3.183.23%) / DDU (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%)		MADD Project install	` / ` ` /
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  from Possum Point to Calvert Cliffs and install Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%)			· · · · · · · · · · · · · · · · · · ·
Dominion (12.5613.03%) / EKPC     a DC line from Calvert     Cliffs to Vienna and a DC     line from Calvert Cliffs to Indian River     Dominion (12.5613.03%) / EKPC     (1.941.77%) / JCPL (3.823.84%) / ME     (1.881.93%) / NEPTUNE*     (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%)     PPL (5.004.72%) / PSEG (6.156.21%)			` <u> </u>
a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River    Cliffs to Vienna and a DC   Cliffs to Vienna and			` <u> </u>
Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River    Cliffs to Vienna and a DC   (1.881.93%) / NEPTUNE*   (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC   (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%)	b0512		`
line from Calvert Cliffs to Indian River  (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%)			` / ` ` /
Indian River  PECO (5.315.29%) / PENELEC  (1.901.89%) / PEPCO (3.903.82%) /  PPL (5.004.72%) / PSEG (6.156.21%)			` /
( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) / PSEG ( <del>6.15</del> <u>6.21</u> %)			, <u> </u>
PPL ( <del>5.004.72</del> %) / PSEG ( <del>6.15</del> <u>6.21</u> %)		137-33-2 - 2 - 2 - 3 - 3	` <del></del> /
			\ <u> </u>
			/ RE ( <del>0.25</del> 0.26%)

	Required 11	equired Transmission Ennancements Annual Revenue Requirement Responsible Customer(s)		
			Load-Ratio Share Allocation:	
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP	
			( <del>14.18</del> <u>14.04</u> %) / APS ( <del>6.05</del> <u>5.61</u> %) /	
			ATSI ( <del>7.92</del> <u>8.10</u> %) / BGE	
			(4.234.36%) / ComEd (13.2013.14%)	
			/ Dayton ( <del>2.05</del> <u>2.15</u> %) / DEOK	
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) / DPL	
			( <del>2.58</del> 2.65%) / Dominion	
			( <del>12.56</del> 13.03%) / EKPC ( <del>1.94</del> 1.77%) /	
		071670	JCPL (3.823.84%) / ME (1.881.93%)	
		Advance n0716 (Ox -	/ NEPTUNE* ( <del>0.42</del> 0.45%) / OVEC	
	b0512.5	Replace 230kV breaker	( <del>0.08</del> 0.07%) / PECO ( <del>5.31</del> 5.29%) /	
		L242)	PENELEC ( <del>1.90</del> 1.89%) / PEPCO	
			( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /	
			PSEG (6.156.21%) / RE (0.250.26%)	
ļ			DFAX Allocation:	
			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%)	
			Load-Ratio Share Allocation:	
1			AEC ( <del>1.72</del> 1.71%) / AEP	
			( <del>14.18</del> 14.04%) / APS ( <del>6.05</del> 5.61%) /	
			ATSI ( <del>7.92</del> 8.10%) / BGE	
			( <del>4.23</del> 4.36%) / COMED	
			( <del>13.20</del> 13.14%) / DAYTON	
		Advance n0717	( <del>2.05</del> 2.15%) / DEOK ( <del>3.18</del> 3.23%) /	
		(Possum Point -	DL ( <del>1.681.73</del> %) / DPL ( <del>2.582.65</del> %) /	
	b0512.6	Replace 230kV breaker	DOMINION ( <del>12.56</del> 13.03%) / EKPC	
		SC192)	( <del>1.941.77</del> %) / JCPL ( <del>3.823</del> .84%) /	
			ME ( <del>1.88</del> 1.93%) / NEPTUNE*	
			( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%) /	
			PECO ( <del>5.31</del> 5.29%) / PENELEC	
			( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%) /	
			PPL ( <del>5.004.72</del> %) / PSEG	
			( <del>6.15</del> 6.21%) / RE ( <del>0.25</del> 0.26%)	
1	I	I	(0.15 <u>0.21</u> /0)/ Teb (0.25 <u>0.20</u> /0)	

<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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install dual primary protection schemes on Gosport lines 62 and 51 at b0583 the remote terminals Dominion (100%) (Chesapeake on the 62 line and Reeves Ave on the 51 line) Install a second 500/115 b0756 kV autotransformer at Dominion (100%) Chancellor 500 kV **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.6<u>1</u>%) / ATSI (<del>7.92</del><u>8.10</u>%) / BGE (4.234.36%) / ComEd (<del>13.2013.14</del>%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion Install two 500 kV (<del>12.56</del>13.03%) / EKPC b0756.1 breakers at Chancellor 500 (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) kV/ ME (<del>1.88</del>1.93%) / NEPTUNE\* (<del>0.42</del>0.45%) / OVEC (<del>0.08</del><u>0.07</u>%) / PECO (<del>5.31</del>5.29%) / PENELEC (1.901.89%) / PEPCO (<del>3.90</del>3.82%) / PPL (<del>5.00</del>4.72%) / PSEG (6.156.21%) / RE (0.250.26%)**DFAX Allocation:** 

Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor one mile of		
b0757	Chesapeake – Reeves		
	Avenue 115 kV line		Dominion (100%)
	Install a second		
b0758	Fredericksburg 230/115		
	kV autotransformer		Dominion (100%)
	Build 115 kV line from		
	Kitty Hawk to Colington		
1.07.00	115 kV (Colington on the		
b0760	existing line and Nag's		
	Head and Light House DF		
	on new line)		Dominion (100%)
	Install a second 230/115		
b0761	kV transformer at Possum		
	Point		Dominion (100%)
	Build a new Elko station		
1.07.60	and transfer load from		
b0762	Turner and Providence		
	Forge stations		Dominion (100%)
	Rebuild 17.5 miles of the		
b0763	line for a new summer		
	rating of 262 MVA		Dominion (100%)
	Increase the rating on 2.56	5	,
	miles of the line between		
b0764	Greenwich and Thompson	1	
	Corner; new rating to be		
	257 MVA		Dominion (100%)
	Add a second Bull Run		,
b0765	230/115 kV		
	autotransformer		Dominion (100%)
	Increase the rating of the		` '
1.07.66	line between Loudoun and	1	
b0766	Cedar Grove to at least		
	150 MVA		Dominion (100%)
	Extend the line from Old		` '
b0767	Church – Chickahominy		
	230 kV		Dominion (100%)
	•	•	3 /

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements A	nnual Revenue Requirement	Responsible Customer(s)
b0768	Loop line #251 Idylwood  – Arlington into the GIS		D (1000()
	sub		Dominion (100%)
	Re-tension 15 miles of the		
b0769	line for a new summer		Daninian (1000/)
	rating of 216 MVA		Dominion (100%)
b0770	Add a second 230/115 kV autotransformer at Lanexa		Dominion (100%)
	Replace Lanexa 115 kV		(
b0770.1	breaker '8532'		Dominion (100%)
b0770.2	Replace Lanexa 115 kV		
00770.2	breaker '9232'		Dominion (100%)
	Build a parallel		
b0771	Chickahominy – Lanexa		
	230 kV line		Dominion (100%)
	Install a second Elmont		
b0772	230/115 kV		
	autotransformer		Dominion (100%)
b0772.1	Replace Elmont 115 kV		
0077211	breaker '7392'		Dominion (100%)
b0774	Install a 33 MVAR		
00774	capacitor at Bremo 115 kV		Dominion (100%)
	Reconductor the		
	Greenwich – Virginia		
	Beach line to bring it up to		
b0775	a summer rating of 261		
307.2	MVA; Reconductor the		
	Greenwich – Amphibious		
	Base line to bring it up to		D (1000()
	291 MVA		Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	Fransmission Enhancements A	Annual Revenue Requirement	nt 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		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP   (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%)   / BGE (4.234.36%) / ComEd   (13.2013.14%) / Dayton   (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion   (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%)   / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%)   / PECO (5.315.29%) / PENELEC   (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE   (0.250.26%)  DFAX Allocation:
			Dominion (100%)

b0785	Rebuild the Chase City –	
00703	Crewe 115 kV line	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 7	Transmission Enhancements A	annual Revenue Requiremer	nt Responsible Customer(s)
	Reconductor the Moran		
b0786	DP – Crewe 115 kV		
	segment		Dominion (100%)
	Upgrade the Chase City –		
b0787	Twitty's Creek 115 kV		
	segment		Dominion (100%)
	Reconductor the line from		
b0788	Farmville – Pamplin 115		
	kV		Dominion (100%)
	Close switch 145T183 to		
	network the lines. Rebuild		
b0793	the section of the line #145		
	between Possum Point –		
	Minnieville DP 115 kV		Dominion (100%)
b0815	Replace Elmont 230 kV		
00813	breaker '22192'		Dominion (100%)
1.001.6	Replace Elmont 230 kV		,
b0816	breaker '21692'		Dominion (100%)
	Replace Elmont 230 kV		20mmon (10070)
b0817	breaker '200992'		Dominion (100%)
			Dominion (100%)
b0818	Replace Elmont 230 kV breaker '2009T2032'		D :: (1000()
	breaker 200912032		Dominion (100%)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			(14.18 <u>14.04</u> %) / APS
			( <del>6.05</del> 5.61%) / ATSI ( <del>7.92</del> 8.10%)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd ( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
			( <del>2.03</del> /2.15/%)/DEOR ( <del>3.183.23</del> %)/DL ( <del>1.68</del> 1.73%)/
	At Mt. Storm, replace the		DPL ( <del>2.58</del> 2.65%) / Dominion
	existing MOD on the 500		( <del>12.56</del> 13.03%) / EKPC
b0837	kV side of the transformer		( <del>1.941.77</del> %) / JCPL ( <del>3.82</del> 3.84%)
	with a circuit breaker		/ ME ( <del>1.88</del> 1.93%) / NEPTUNE*
	with a circuit breaker		( <del>0.42</del> 0.45%) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
			PSEG ( <del>6.15</del> 6.21%) / RE
			( <del>0.25</del> 0.26%)
			DFAX Allocation:
	1		~1.111.1110CMUUIII

	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Ennancements	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required 1	1	Ailiuai Kevenue Kequitement	Responsible Cusiomer(s)
	Install 50-100 MVAR		
	variable reactor banks at		
	Carolina, Dooms,		
b0928	Everetts, Idylwood, N.		
	Alexandria, N. Anna,		
	Suffolk and Valley 230		
	kV substations		Dominion (100%)
b1056	Build a 2nd Shawboro –		
01030	Elizabeth City 230kV line		Dominion (100%)
	Add a third 230/115 kV		
b1058	transformer at Suffolk		
	substation		Dominion (100%)
	Replace Suffolk 115 kV		
b1058.1	breaker 'T122' with a 40		
	kA breaker		Dominion (100%)
	Convert Suffolk 115 kV		
	straight bus to a ring bus		
b1058.2	for the three 230/115 kV		
	transformers and three 115	j	
	kV lines		Dominion (100%)
	Rebuild the existing 115		
	kV corridor between		
b1071	Landstown - Va Beach		
010/1	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required	Transmission Emiancements	Allituai Revenue Requirement	Responsible Customer(s)
	Build new Radnor Heights		
	Sub, add new underground		
	circuit from Ballston -		
	Radnor Heights, Tap the		
b1088	Glebe - Davis line and		
	create circuits from Davis -		
	Radnor Heights and Glebe		
	- Radnor Heights		
			Dominion (100%)
	Install 2nd Burke to		
b1089	Sideburn 230 kV		
01009	underground cable		
			Dominion (100%)
	Install a 150 MVAR 230		
b1090	kV capacitor and one 230		
01090	kV breaker at Northwest		
			Dominion (100%)
	Reconductor Chase City		
b1095	115 kV bus and add a new		
	tie breaker		Dominion (100%)
	Construct 10 mile double		
b1096	ckt. 230kV tower line		
01090	from Loudoun to		
	Middleburg		Dominion (100%)
1-1102	Replace Bremo 115 kV		
b1102	breaker '9122'		Dominion (100%)
b1103	Replace Bremo 115 kV		
	breaker '822'		Dominion (100%)
	Build a 4-6 mile long 230		\ /
b1172	kV line from Hopewell to		
	Bull Hill (Ft Lee) and		
	install a 230-115 kV Tx		Dominion (100%)
	·	i .	` ,

<sup>\*</sup> Neptune Regional Transmission System, LLC

required I	ransmission Emancements Affilia	Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
		/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> <u>2.15</u> %) / DEOK
		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
	Build new Brambleton	DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	500 kV three breaker ring	( <del>12.56</del> <u>13.03</u> %) / EKPC
b1188	bus connected to the	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <u>3.82</u> <u>3.84</u> %)
	Loudoun to Pleasant View	/ ME ( <del>1.88</del> 1.93 %) / NEPTUNE*
	500 kV line	( <del>0.42</del> <del>0.45</del> %) / OVEC
		( <del>0.08</del> 0.07%) / PECO
		( <del>5.315.29</del> %) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> 3.82%)/PPL ( <del>5.00</del> 4.72%)/
		PSEG ( <del>6.15</del> 6.21%) / RE
		(0.250.26%)
		DFAX Allocation:
		Dominion (100%)
	Replace Loudoun 230 kV	
b1188.1	breaker '200852' with a	
	63 kA breaker	Dominion (100%)
	Replace Loudoun 230 kV	
b1188.2	breaker '2008T2094' with	
	a 63 kA breaker	Dominion (100%)
	Replace Loudoun 230 kV	
b1188.3	breaker '204552' with a	
	63 kA breaker	Dominion (100%)
	Replace Loudoun 230 kV	
b1188.4	breaker '209452' with a	
0110011	63 kA breaker	Dominion (100%)
	Replace Loudoun 230 kV	Dominion (10070)
b1188.5	breaker 'WT2045' with a	
	63 kA breaker	Dominion (100%)
	Install one 500/230 kV	AEC (0.22%) / BGE (7.90%) /
	transformer and two 230	DPL (0.59%) / Dominion
b1188.6	kV breakers at	(75.58%) / ME (0.22%) / PECO
	Brambleton	(0.73%) / ME (0.22%) / PECO (0.73%) / PEPCO (14.76%)

Required	Transmission Ennancements	Annuai 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Enhancements F	Annuai Revenue Requirement	Responsible Customer(s)
	Install a 115 kV breaker at		
b1310	Broadnax substation on the		
01310	South Hill side of		
	Broadnax		Dominion (100%)
	Install a 230 kV 3000 amp		
b1311	breaker at Cranes Corner		
01311	substation to sectionalize		
	the 2104 line into two lines		Dominion (100%)
	Loop the 2054 line in and		
	out of Hollymeade and		
b1312	place a 230 kV breaker at		
01312	Hollymeade. This creates		
	two lines: Charlottesville -		
	Hollymeade		Dominion (100%)
	Resag wire to 125C from		
	Chesterfield – Shockoe		
b1313	and replace line switch		
01313	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Fransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Convert line #64		
	Trowbridge to Winfall to		
b1315	230 kV and install a 230		
	kV capacitor bank at		
	Winfall		Dominion (100%)
	Rebuild 10.7 miles of 115		
b1316	kV line #80, Battleboro –		
	Heartsease DP		Dominion (100%)
	LSE load power factor on		· ·
	the #47 line will need to		
1 1017	meet MOA requirements		
b1317	of .973 in 2015 to further		
	resolve this issue through		
	at least 2019		Dominion (100%)
	Install a 115 kV bus tie		
1 1210	breaker at Acca substation		
b1318	between the Line #60 and		
	Line #95 breakers		Dominion (100%)
	Resag line #222 to 150 C		,
	and upgrade any		
1 1210	associated equipment to a		
b1319	2000A rating to achieve a		
	706 MVA summer line		
	rating		Dominion (100%)
	Install a 230 kV, 150		· ·
b1320	MVAR capacitor bank at		
	Southwest substation		Dominion (100%)
	Build a new 230 kV line		` ,
b1321	North Anna – Oak Green		
	and install a 224 MVA		
	230/115 kV transformer at	t	BGE (0.85%) / Dominion
	Oak Green		(97.96%) / PEPCO (1.19%)
b1322	Rebuild the 39 Line		
	(Dooms – Sherwood) and		
	the 91 Line (Sherwood –		
	Bremo)		Dominion (100%)
	Install a 224 MVA		
b1323	230/115 kV transformer at	t	
	Staunton. Rebuild the 115	;	
	kV line #43 section		
	Staunton - Verona		Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Kequileu i	Fransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Install a 115 kV capacitor		
	bank at Oak Ridge. Install		
b1324	a capacitor bank at New		
01324	Bohemia. Upgrade		
	230/34.5 kV transformer		
	#3 at Kings Fork		Dominion (100%)
	Rebuild 15 miles of line		
L1225	#2020 Winfall – Elizabeth		
b1325	City with a minimum 900		
	MVA rating		Dominion (100%)
	Install a third 168 MVA		
	230/115 kV transformer at		
L1226	Kitty Hawk with a		
b1326	normally open 230 kV		
	breaker and a low side 115		
	kV breaker		Dominion (100%)
	Rebuild the 20 mile		
L1227	section of line #22		
b1327	between Kerr Dam –		
	Eatons Ferry substations		Dominion (100%)
	Uprate the 3.63 mile line		
	section between Possum		
b1328	and Dumfries substations,		AEC (0.66%) / APS (3.59%) /
	replace the 1600 amp		DPL (0.91%) / Dominion
	wave trap at Possum Point		(92.94%) / PECO (1.90%)
	Install line-tie breakers at		
b1329	Sterling Park substation		
	and BECO substation		Dominion (100%)
	Install a five breaker ring		
	bus at the expanded Dulles		
L1220	substation to accommodate	;	
b1330	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%)
1 1222	Build Cannon Branch to		
b1332	Nokesville 230 kV line		Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

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

Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 1	ransmission Enhancements A	nnuai Revenue Requirement	Responsible Customer(s)
b1506.1	At Gainesville Substation,		
	create two 115 kV		
01300.1	straight-buses with a		
	normally open tie-breaker		Dominion (100%)
	Upgrade Line 124 (radial		
	from Loudoun) to a		
	minimum continuous		
b1506.2	rating of 500 MVA and		
	network it into the 115 kV		
	bus feeding NOVEC's DP		
	at Gainesville		Dominion (100%)
	Install two additional 230		
	kV breakers in the ring at		
	Gainesville (may require		
b1506.3	substation expansion) to		
	accommodate conversion		
	of NOVEC's Gainesville		
	to Wheeler line		Dominion (100%)
	Convert NOVEC's		
	Gainesville-Wheeler line		
	from 115 kV to 230 kV		
b1506.4	(will require Gainsville		
01300.4	DP Upgrade replacement		
	of three transformers total		
	at Atlantic and Wheeler		
	Substations)		Dominion (100%)

	Required T	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> 3.23%) / DL ( <del>1.68</del> 1.73%) /
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
			( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	b1507	Rebuild Mt Storm –	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	01307	Doubs 500 kV	( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			APS ( <del>24.07</del> <u>21.37</u> %) / BGE
			( <del>9.92</del> 9.63%) / Dominion
			( <del>54.43<u>59.60</u>%</del> ) / PEPCO
			( <del>11.58</del> <u>9.40</u> %)
	1 1 500 1	Build a 2nd 230 kV Line	A DG (27.05%) / D
	b1508.1	Harrisonburg to Endless	APS (37.05%) / Dominion
		Caverns	(62.95%)
	b1508.2	Install a 3rd 230-115 kV	APS (37.05%) / Dominion
		Tx at Endless Caverns	(62.95%)
		Upgrade a 115 kV shunt	
	b1508.3	capacitor banks at Merck	APS (37.05%) / Dominion
		and Edinburg	(62.95%)
	1.476	Advance n1752 (Replace	
	b1536	OX 230 breaker 24342	
		with an (63kA breaker)	Dominion (100%)
		Advance n1753 (Replace	
	b1537	OX 230 breaker	
01337	243T2097 with an 63kA		
		breaker)	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required i	Tansmission Emiancements	Allituat Revenue Requiremen	it 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		Dominion (100%)  Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP
			<b>DFAX Allocation:</b> Dominion (100%)

b1648	Upgrade name plate rating at Morrisville 500kV breaker 'H2T545' with 50kA breaker	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS  (6.055.61%) / ATSI (7.928.10%)  / BGE (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%) /  DPL (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%)  / ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC  (0.080.07%) / PECO  (5.315.29%) / PENELEC  (1.901.89%) / PEPCO  (3.903.82%) / PPL (5.004.72%) /  PSEG (6.156.21%) / RE  (0.250.26%)
		(0.25 <u>0.26</u> %) <b>DFAX Allocation:</b> Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

	Required 7	Transmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18<u>1</u>4.04</del> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
		Replace Morrisville	( <del>12.56</del> <u>13.03</u> %) / EKPC
	b1649	500kV breaker 'H1T580'	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
		with 50kA breaker	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			Dominion (100%)
1			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18<u>14.04</u></del> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE (4.234.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			(2.052.15%) / DEOK
			(3.183.23%)/DL (1.681.73%)/
		D 1 14 : 31	DPL (2.582.65%) / Dominion
	1.1650	Replace Morrisville	( <del>12.56</del> <u>13.03</u> %) / EKPC
	b1650	500kV breaker 'H2T569'	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
		with 50kA breaker	/ ME ( <del>1.881.93</del> %) / NEPTUNE*
			( <del>0.42</del> 0.45%) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.315.29</del> %) / PENELEC
			(1.901.89%) / PEPCO
			(3.903.82%) / PPL (5.004.72%) /
			PSEG ( <del>6.156.21</del> %) / RE
l			( <del>0.25</del> 0.26%)
			DFAX Allocation:
			Dominion (100%)

	Replace Loudoun 230kV	
b1651	breaker '295T2030' with	
	63kA breaker	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Kequileu .	Fransmission Enhancements A	Annual Revenue Requireme	ent Responsible Customer(s)
	Replace Ox 230kV		
b1652	breaker '209742' with		
	63kA breaker		Dominion (100%)
	Replace Clifton 230kV		
b1653	breaker '26582' with		
	63kA breaker		Dominion (100%)
	Replace Clifton 230kV		
b1654	breaker '26682' with		
	63kA breaker		Dominion (100%)
	Replace Clifton 230kV		
b1655	breaker '205182' with		
	63kA breaker		Dominion (100%)
	Replace Clifton 230kV		
b1656	breaker '265T266' with		
	63kA breaker		Dominion (100%)
	Replace Clifton 230kV		
b1657	breaker '2051T2063' with		
	63kA breaker		Dominion (100%)
			<b>Load-Ratio Share Allocation:</b>
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE (4 <del>.23</del> 4.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
b1694	Rebuild Loudoun -		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
01094	Brambleton 500 kV		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
			/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			<b>DFAX Allocation:</b>
			BGE ( <del>11.54</del> <u>11.04</u> %) / Dominion
			( <del>75.32</del> <u>78.91</u> %) / PEPCO
			( <del>13.14</del> <u>10.05</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%)
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Required 1	ransmission enhancements A	nnual Revenue Requirement	Responsible Customer(s)
		1	AEC (1.35%) / APS (15.65%) /
	Build a 2nd Clark -	I	BGE (10.53%) / DPL (2.59%) /
	Idylwood 230 kV line and		Dominion (46.97%) / JCPL
b1697	install 230 kV gas-hybrid		(2.36%) / ME (1.91%) /
	breakers at Clark		NEPTUNE* (0.23%) / PECO
	breakers at Clark		(4.48%) / PEPCO (11.23%) /
			PSEG (2.59%) / RE (0.11%)
	Install a 2nd 500/230 kV		APS (4.21%) / BGE (13.28%) /
b1698	transformer at Brambleton		DPL (1.09%) / Dominion
	transformer at Bramoleton		(59.38%) / PEPCO (22.04%)
		1	Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
	Install a 500 kV breaker at Brambleton		( <del>14.18</del> <u>14.04</u> %) / APS
		(4	6.05 <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
		l '	( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL (2.582.65%) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
b1698.1		`	<del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
		/	ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> <u>1.89</u> %) / PEPCO
		(	3.90 <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			<b>DFAX Allocation:</b>
			Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

	Tansimission Emiancements 7 mil	 1
b1698.6	Replace Brambleton 230	7 (1000)
	kV breaker '2094T2095'	Dominion (100%)
	Reconfigure Line #203 to	
	feed Edwards Ferry sub	
b1699	radial from Pleasant View	
01099	230 kV and install new	
	breaker bay at Pleasant	
	View Sub	Dominion (100%)
	Install a 230/115 kV	
	transformer at the new	
b1700	Liberty substation to	
	relieve Gainesville	
	Transformer #3	Dominion (100%)
	Reconductor line #2104	APS (8.66%) / BGE (10.95%) /
b1701	(Fredericksburg - Cranes	Dominion (63.30%) / PEPCO
	Corner 230 kV)	(17.09%)
1 1704	Install a 2nd 138/115 kV	
b1724	transformer at Edinburg	Dominion (100%)
	Replace the 115/34.5 kV	
b1728	transformer #1 at Hickory	
01/28	with a 230/34.5 kV	
	transformer	Dominion (100%)
	Add 4 breaker ring bus at	
	Burton 115 kV substation	
	and construct a 115 kV	
b1729	line approximately 3.5	
	miles from Oakwood 115	
	kV substation to Burton	
	115 kV substation	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

	Install a 230/115 kV	nuai Revenue Requirement	100poneses customer(e)
b1730	transformer at a new		
01750	Liberty substation		Dominion (100%)
	Uprate or rebuild Four		2011111011 (10070)
	Rivers – Kings Dominion		
	115 kV line or Install		
b1731	capacitors or convert load		
	from 115 kV system to		
	230 kV system		Dominion (100%)
	Split Wharton 115 kV		
	capacitor bank into two		
	smaller units and add		
	additional reactive support		
b1790	in area by correcting		
	power factor at Pantego		
	115 kV DP and FivePoints		
	115 kV DP to minimum of		
	0.973		Dominion (100%)
	Wreck and rebuild 2.1		, ,
b1791	mile section of Line #11		APS (5.83%) / BGE (6.25%) /
01/91	section between		Dominion (78.38%) / PEPCO
	Gordonsville and Somerset		(9.54%)
	Rebuild line #33 Halifax		
b1792	to Chase City, 26 miles.		
01/92	Install 230 kV 4 breaker		
	ring bus		Dominion (100%)
	Wreck and rebuild		
	remaining section of Line		
b1793	#22, 19.5 miles and		
	replace two pole H frame		
	construction built in 1930		Dominion (100%)
	Split 230 kV Line #2056		
	(Hornertown - Rocky		
	Mount) and double tap line		
b1794	to Battleboro Substation.		
U1/7 <del>4</del>	Expand station, install a		
	230 kV 3 breaker ring bus		
	and install a 230/115 kV		
	transformer		Dominion (100%)

Required'	Transmission Enhancements	Annual Revenue Requirem	nent Responsible Customer(s)
	Reconductor segment of		
b1795	Line #54 (Carolina to		
01793	Woodland 115 kV) to a		
	minimum of 300 MVA		Dominion (100%)
	Install 115 kV 25 MVAR		
b1796	capacitor bank at Kitty		
	Hawk Substation		Dominion (100%)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
	Wreck and rebuild 7 miles		( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL (2.582.65%) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
			( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	of the Dominion owned		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
b1797	section of Cloverdale -		( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
	Lexington 500 kV		/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			(3.903.82%) / PPL (5.004.72%) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		_	( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			<u>AEP (0.79%) / APS (53.70%)</u>
			ATSI (3.01%) / Dayton
			( <del>0.77</del> 0.15%) / DEOK
			(1.85 <u>0.40</u> %) / Dominion
			(5.171.13%) / EKPC (0.790.23%)
			/ PEPCO ( <del>88.41<u>43.60</u>%)</del>

Dominion ( <del>91.39</del> 100%) <del>/ PEPCO</del>	b1798	Build a 450 MVAR SVC and 300 MVAR switched shunt at Loudoun 500 kV	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS  (6.055.61%) / ATSI (7.928.10%)  / BGE (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%) /  DPL (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%)  / ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC (0.080.07%)  / PECO (5.315.29%) / PEPCO  (3.903.82%) / PPL (5.004.72%) /  PSEG (6.156.21%) / RE  (0.250.26%)  DFAX Allocation:  Dominion (91.39100%) / PEPCO
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<sup>\*</sup> Neptune Regional Transmission System, LLC

]	Required 7	Transmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
		Build 150 MVAR	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	b1799	Switched Shunt at	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	01777	Pleasant View 500 kV	( <del>0.42</del> <u>0.45</u> %) / OVEC ( <del>0.08</del> <u>0.07</u> %)
		1 leasant view 500 k v	/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
,			DFAX Allocation:
			APS ( <del>6.31</del> 1.22%) / <del>DL</del> <u>DPL</u>
			( <del>1.34</del> <u>0.33</u> %) / Dominion
			( <del>85.81</del> 91.89%) / <u>EKPC (5.42%) /</u>
			ME ( <del>1.66</del> <u>0.31</u> %) / PEPCO
			(4.880.83%)
1			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			(14.1814.04%) / APS
			( <del>6.05</del> 5.61%) / ATSI ( <del>7.92</del> 8.10%)
			/ BGE (4.234.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
		Install a 250 MVAR	(3.183.23%) / DL (1.681.73%) /
	b1805	SVC at the existing Mt.	DPL (2.582.65%) / Dominion
		Storm 500kV substation	( <del>12.56</del> <u>13.03</u> %) / EKPC
		Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%)
			/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE* ( <del>0.42</del> 0.45%) / OVEC ( <del>0.08</del> 0.07%)
			/ PECO ( <del>5.31</del> <u>5.29</u> %) / PENELEC ( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.903.82</del> %)/PEPCO ( <del>3.903.82</del> %)/PPL( <del>5.004.72</del> %)/
			PSEG ( <del>6.15</del> 6.21%) / RE
			( <del>0.25</del> 0.26%)
1			( <del>V.23</del> V.20%)

		<b>DFAX Allocation:</b> APS ( <del>70.95</del> <u>78.44</u> %) / PEPCO ( <del>29.05</del> <u>21.56</u> %)
b1809	Replace Brambleton 230 kV Breaker '22702'	Dominion (100%)
b1810	Replace Brambleton 230 kV Breaker '227T2094'	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

,	are Allocation:
AEC ( <del>1.72</del> 1	
	<u>.71</u> %) / AEP
	<u>)4</u> %) / APS
( <del>6.05</del> <u>5.61</u> %) / A	TSI ( <del>7.92</del> <u>8.10</u> %)
/ BGE ( <del>4.23</del> <u>4.</u>	36%) / ComEd
( <del>13.20</del> 13.14	(%) / Dayton
	%) / DEOK
	DL ( <del>1.68</del> <u>1.73</u> %) /
NITTY TO VITTAC L TOOV	(%) / Dominion
h1005 1 500 kV Line (7 miles	3%) / EKPC
overhead) (1.941./7%)/JC	CPL ( <del>3.82</del> <u>3.84</u> %)
/ ME ( <del>1.88</del> <u>1.93</u> )	%) / NEPTUNE*
	VEC ( <del>0.08</del> <u>0.07</u> %)
	<u>9</u> %) / PENELEC
	6) / PEPCO
	PL ( <del>5.00</del> 4.72%) /
	6.21%)/RE
'	<u>0.26</u> %)
	llocation:
	on (100%)
,	are Allocation:
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	. <u>71</u> %) / AEP
	<u>)4</u> %) / APS
	TSI ( <del>7.92</del> <u>8.10</u> %)
	36%) / ComEd
	(%) / Dayton
	%) / DEOK DL ( <del>1.68</del> 1.73%) /
	5%) / Dominion
	3%) / EKPC
1 1 1 1 9 1 3 7 1 3 7 1 3 1 1 1 1 1 1 1 1 1 1 1 1	CPL (3.823.84%)
	%) / NEPTUNE*
	VEC ( <del>0.08</del> 0.07%)
	9%) / PENELEC
	6) / PEPCO
	PL ( <del>5.004.72</del> %) /
	66.21%) / RE
	0.26%)
!   ·	llocation:
	on (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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Kcquiicu i	ransmission Ennancements	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	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP
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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Load-Ratio Share Allocation:     AEC (1-721.71%) / AEP (14+.1814.04%) / APS (6.055.61%) / ATSI (7-928.10%)     BGE (4-234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1-681.73%) /   DPL (2-882.65%) / Dominion (12-5613.03%) / EKPC (19-41.77%) / DPL (3-823.84%) / ME (1-881.93%) / NEPTUNE* (9-420.45%) / OVEC (9.080.07%) / PENELEC (19-91.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) /   PSEG (6-156.21%) / RE (9.259.26%)     DFAX Allocation:     DEOK (5.02%) / Dominion (92.8999.00%) / EKPC (2.091.00%)     Uprate Bremo -   Midlothian 230 kV to its maximum operating temperature     Build a Suffolk - Yadkin 230 kV line (14 miles) and install 4 breakers     b1910	required	Transmission Emilancements	Alinual Revenue Requirement Responsible Customer(s)
Comparison   Com			
b1908   Rebuild Lexington -   Dooms 500 kV   Rebuild Lexington -			
BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.4052.15%) / DEOK (3.183.23%) / DEOK (3.183.23%) / DEOK (3.183.23%) / DEOK (3.183.23%) / DEOK (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / PECO (0.080.07%) / PECO (0.080.07%) / PECO (3.903.82%) / PENELEC (1.901.89%) / PENELEC (1.901.89%) / PENELEC (1.901.89%) / PENELEC (1.901.89%) / PECO (3.903.82%) / PEL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)   DFAX Allocation: DEOK (5.02%) / Dominion (92.8999.00%) / EKPC (2.091.00%)   APS (6.31%) / BGE (3.81%) / Dominion (81.90%) / PEPCO (7.98%)   Dominion (100%)   APS (14.85%) / BGE (3.10%) / Dominion (100%)   APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)   Dominion (74.12%) / PEPCO (7.93%)   DEOK (0.46%) / Dominion (1.93%)   DEOK (0.46%) / DOM			`
Bigorian   Bigorian			\ <u> </u>
Bild a Suffolk - Yadkin bild			· · · · · · · · · · · · · · · · · · ·
Bild a Suffolk – Yadkin   bild a second Valley   bild a south of the value of the			
DPL (2.582_65%) / Dominion (12.5613.03%) / EKPC (1.941_77%) / JCPL (3.823_84%) / ME (4.881_93%) / NEPTUNE* (0.420_45%) / OVEC (0.980_07%) / PECO (5.345_29%) / PENELEC (1.901_89%) / PEPCO (3.903_82%) / PPL (5.004_72%) / PSEG (6.156_21%) / RE (0.250_26%)   DFAX Allocation: DEOK (5.02%) / Dominion (92.8999_00%) / EKPC (2.091_00%)			`
Billd a Suffolk – Yadkin			
Bill a Suffolk - Yadkin			`
b1908   Rebuild Lexington -			`
Dooms 500 kV		Rebuild Lexington –	
Control   Cont	b1908		,
Continue   Continue		2 Johns 2 John 1	
(1.901.89%) / PEPCO			`
Build a Suffolk – Yadkin   230 kV line (14 miles)   and install 4 breakers   Add a second Valley   500/230 kV TX   DEOK (0.456.21 %) / BEG (6.156.21%) / PPEC (6.250.26%)			`
PSEG (6.156.21%) / RE			,
DFAX Allocation:   DEOK (5.02%) / Dominion (92.8999.00%) / EKPC (2.091.00%)			` / ` ` /
DFAX Allocation:   DEOK (5.02%) / Dominion   O92.8999.00%) / EKPC   (2.091.00%)   Uprate Bremo –   Midlothian 230 kV to its   Maximum operating temperature   (7.98%)   Build a Suffolk – Yadkin 230 kV line (14 miles) and install 4 breakers   Dominion (100%)   Dominion (100%)   Add a second Valley 500/230 kV TX   DeoK (0.46%) / Dominion (74.12%) / PEPCO (7.93%)   DeoK (0.46%) / Dominion   DeoK (0.46%) / DeoK			· — ·
DEOK (5.02%) / Dominion (92.8999.00%) / EKPC (2.091.00%)     Uprate Bremo - Midlothian 230 kV to its maximum operating temperature (7.98%)     Build a Suffolk - Yadkin 230 kV line (14 miles) and install 4 breakers   Dominion (100%)     b1911			
Uprate Bremo -   Midlothian 230 kV to its   APS (6.31%) / BGE (3.81%) / Dominion (81. 90%) / PEPCO (7.98%)			
Uprate Bremo -   Midlothian 230 kV to its   maximum operating temperature   Emperature   Dominion (81. 90%) / PEPCO (7.98%)			` '
Description			`
Midlothian 230 kV to its maximum operating temperature   APS (6.31%) / BGE (3.81%) / Dominion (81. 90%) / PEPCO (7.98%)		Handa Dana	( <del>2.09</del> 1.00%)
Dominion (81. 90%) / PEPCO (7.98%)   Build a Suffolk – Yadkin     b1910   230 kV line (14 miles)     and install 4 breakers   Dominion (100%)     Add a second Valley     500/230 kV TX   Depth (7.93%)     b1912   Install a 500 MVAR SVC     Deok (0.46%) / Dominion (100%)     Deok (0.46%) / Domin		1 *	ADC (C 210/) / DCE (2 010/) /
temperature (7.98%)  Build a Suffolk – Yadkin 230 kV line (14 miles) and install 4 breakers  Dominion (100%)  APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)  Install a 500 MVAR SVC  DEOK (0.46%) / Dominion	b1909		· · · · · · · · · · · · · · · · · · ·
Build a Suffolk – Yadkin   230 kV line (14 miles)   and install 4 breakers   Dominion (100%)		1 0	` '
b1910 230 kV line (14 miles) and install 4 breakers  Dominion (100%)  APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)  b1912 Install a 500 MVAR SVC  DEOK (0.46%) / Dominion		*	(/.98%)
and install 4 breakers  Dominion (100%)  APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)  Install a 500 MVAR SVC  DEOK (0.46%) / Dominion	h1010		
b1911 Add a second Valley 500/230 kV TX  APS (14.85%) / BGE (3.10%) / Dominion (74.12%) / PEPCO (7.93%)  Install a 500 MVAR SVC  DEOK (0.46%) / Dominion	01910	` ,	D:-: (1000/)
b1911 Add a second Valley 500/230 kV TX Dominion (74.12%) / PEPCO (7.93%)  b1912 Install a 500 MVAR SVC DEOK (0.46%) / Dominion		and install 4 breakers	` '
b1912	h1011	Add a second Valley	` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
b1912 Install a 500 MVAR SVC DEOK (0.46%) / Dominion	01911	500/230 kV TX	
b 9 2   =			
at Landstown 230 kV (99 54%)	b1912		22011 (0.1070) / 20111111011
(27.5 +70)		at Landstown 230 kV	(99.54%)
b2053 Rebuild 28 mile line	b2053	Rehuild 28 mile line	
AEP (100%)	02033	Reduild 20 mile mile	AEP (100%)

	Install four additional 230		
	kV 100 MVAR variable		
h2125	shunt reactor banks at		
b2125	Clifton, Gallows Road,		
	Garrisonville, and		
	Virginia Hills substations		Dominion (100%)
	Install two additional 230		
	kV 100 MVAR variable		
b2126	shunt reactor banks at		
	Churchland and		
	Shawboro substations		Dominion (100%)
<u> </u>	N	1 70	2 ommon (10070)

\* Neptune Regional Transmission System, LLC

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Add a motor to an existing		
	switch at Prince George to		
	allow for Sectionalizing		
b2181	scheme for line #2124 and		
	allow for Brickhouse DP		
	to be re-energized from the		
	115 kV source		Dominion (100%)
	Install 230kV 4-breaker		
	ring at Enterprise 230 kV		
b2182	to isolate load from		
	transmission system when		
	substation initially built		Dominion (100%)
	Add a motor to an existing		
b2183	switch at Keene Mill to		
02183	allow for a sectionalizing		
	scheme		Dominion (100%)
	Install a 230 kV breaker at		
	Tarboro to split line #229.		
b2184	Each will feed an		
02104	autotransformer at		
	Tarboro. Install switches		
	on each autotransformer		Dominion (100%)
	Uprate Line #69 segment		
	Reams DP to Purdy (19		
b2185	miles) from 41 MVA to		
02103	162 MVA by replacing 5		
	structures and re-sagging		
	the line from 50C to 75C		Dominion (100%)
	Install a 2nd 230-115kV		
	transformer at Earleys		
b2186	connected to the existing		
	115kV and 230kV ring		
	busses. Add a 115 kV		
	breaker and 230kV		
	breaker to the ring busses		Dominion (100%)
	Install 4 - 230kV breakers		
b2187	at Shellhorn 230 kV to		
	isolate load		Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

#### **SCHEDULE 12 – APPENDIX**

### (22) NAEA Rock Springs, LLC

required Tre	anominosion Emiancements	Timidal Revenue Requirement Responsible Customer(s)
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI
		( <del>7.92</del> 8.10%) / BGE
		( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> 2.15%) / DEOK
	Damla as a vysva tuon	( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %)
	Replace a wave trap potential transformer at Rock Springs 500 kV substation – 5025 Line Terminal Upgrade	/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
b0272.2		( <del>12.56</del> <u>13.03</u> %) / EKPC
00272.2		( <del>1.94</del> <u>1.77</u> %) / JCPL
		( <del>3.82</del> <u>3.84</u> %) / ME
		( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		( <del>0.42</del> <u>0.45</u> %) / OVEC
		( <del>0.08</del> <u>0.07</u> %) / PECO
		( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> 3.82%) / PPL
		( <del>5.004.72</del> %) / PSEG
		( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)

<sup>\*</sup> Neptune Regional Transmission System, LLC

#### SCHEDULE 12 – APPENDIX A

## (2) Baltimore Gas and Electric Company

required 1	Taristrussion Emilancements	Annual Revenue Requirement	Responsible Customer(s)
	Install a 115 kV tie		
	breaker at Wagner to		
b2219	create a separation from		BGE (100%)
	line 110535 and		
	transformer 110-2		
b2220	Install four 115 kV		BGE (100%)
02220	breakers at Chestnut Hill		
	Install an SPS to trip		
b2221	approximately 19 MW		BGE (100%)
02221	load at Green St. and		DGE (100%)
	Concord		
	Install a 230/115kV		
	transformer at Raphael		
	Rd and construct		
	approximately 3 miles of		
b2307	115kV line from Raphael		BGE (100%)
	Rd. to Joppatowne.		
	Construct a 115kV three		
	breaker ring at		
	Joppatowne		
	Build approximately 3		
	miles of 115kV		
	underground line from		
	Bestgate tap to Waugh		
b2308	Chapel. Create two		BGE (100%)
	breaker bay at Waugh		
	Chapel to accommodate		
	the new underground		
	circuit		
	Build a new Camp Small		
b2396	115 kV station and install		BGE (100%)
	30 MVAR capacitor		

## **Baltimore Gas and Electric Company (cont.)**

Required 1	ransmission Ennancements	Annuai Revenue Requirement	Responsible Customer(s)
b2396.1	Install a tie breaker at Mays Chapel 115 kV		BGE (100%)
02370.1	substation		BGE (100%)
	Upgrade the Riverside 115kV substation strain		
	bus conductors on circuits 115012 and		
b2567	115011 with double		BGE (100%)
	bundled 1272 ACSR to		
	achieve ratings of		
	491/577 MVA SN/SE on		
	both transformer leads		
	Reconductor Northwest – Northwest #2 115kV		
b2568	110574 substation tie		BGE (100%)
02300	circuit with 2167 ACSR		DGL (100%)
	to achieve ratings of		
	400/462 MVA SN/SE		
	Conastone 230 kV		AED (C 400) / ADC (0.740) /
	substation tie-in work (install a new circuit		AEP (6.46%) / APS (8.74%) /
	breaker at Conastone		BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK
b2752.6	230 kV and upgrade any		(1.02%) / DL (0.01%) /
	required terminal		Dominion (39.95%) / EKPC
	equipment to terminate		(0.45%) / PEPCO (20.88%)
	the new circuit)		(0.1070) / 121 00 (20.0070)
	Reconductor/Rebuild the		AEP (6.46%) / APS (8.74%) /
	two Conastone –		BGE (19.74%) / ComEd (2.16%)
b2752.7	Northwest 230 kV lines		/ Dayton (0.59%) / DEOK
	and upgrade terminal		(1.02%) / DL (0.01%) /
	equipment on both ends		Dominion (39.95%) / EKPC
			(0.45%) / PEPCO (20.88%)
b2752.8	Replace the Conastone 230 kV '2322 B5'		BGE (100%)
	breaker with a 63kA		DOD (10070)
	breaker		

#### **Baltimore Gas and Electric Company (cont.)**

required 1	ransmission Enhancements	Allitual Revenue Requiremen	it Responsible Customer(s)
b2752.9	Replace the Conastone 230 kV '2322 B6' breaker with a 63kA breaker		BGE (100%)
b2766.1	Upgrade substation equipment at Conastone 500 kV to increase facility rating to 2826 MVA normal and 3525 MVA emergency		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP

<sup>\*</sup>Neptune Regional Transmission System, LLC

## **Baltimore Gas and Electric Company (cont.)**

required i	Talishiission Emancements	7 minuar Revenue Requiremen	it Responsible Customer(s)
	Re-connect the Crane –		
	Windy Edge 110591 &		
	110592 115 kV circuits		
b2816	into the Northeast		BGE (100%)
	Substation with the		
	addition of a new 115 kV		
	3-breaker bay		
	Reconductor the		AEP (2.25%) / APS (2.58%) /
	Conastone to Graceton		BGE (44.61%) / ComEd
	230 kV 2323 & 2324		(0.51%) / Dayton (0.40%) /
b2992.1	circuits. Replace 7		DEOK (1.39%) / DL (0.14%) /
	disconnect switches at		Dominion (27.05%) / EKPC
	Conastone substation		(0.52%) / PENELEC (0.02%) /
	Collasione substation		PEPCO (20.53%)
			AEP (2.25%) / APS (2.58%) /
	Add Bundle conductor on the Graceton – Bagley – Raphael Road 2305 & 2313 230 kV circuits		BGE (44.61%) / ComEd
			(0.51%) / Dayton (0.40%) /
b2992.2			DEOK (1.39%) / DL (0.14%) /
			Dominion (27.05%) / EKPC
			(0.52%) / PENELEC (0.02%) /
			PEPCO (20.53%)
			AEP (2.25%) / APS (2.58%) /
	Replacing short segment		BGE (44.61%) / ComEd
	of substation conductor		(0.51%) / Dayton (0.40%) /
b2992.3	on the Windy Edge to Glenarm 110512 115 kV circuit		DEOK (1.39%) / DL (0.14%) /
			Dominion (27.05%) / EKPC
			(0.52%) / PENELEC (0.02%) /
			PEPCO (20.53%)
			AEP (2.25%) / APS (2.58%) /
b2992.4			BGE (44.61%) / ComEd
	Reconductor the Raphael		(0.51%) / Dayton (0.40%) /
	Road – Northeast 2315 &		DEOK (1.39%) / DL (0.14%) /
	2337 230 kV circuits		Dominion (27.05%) / EKPC
			(0.52%) / PENELEC (0.02%) /
			PEPCO (20.53%)

#### SCHEDULE 12 – APPENDIX A

## (3) Delmarva Power & Light Company

required 116	distrission Emancements Ar	inuai Kevenue Kequirement	Responsible Customer(s)
b2288	Build a new 138 kV line from Piney Grove – Wattsville		DPL (100%)
b2395	Reconductor the Harmony  - Chapel St 138 kV  circuit		DPL (100%)
b2569	Replace Terminal equipment at Silverside 69 kV substation		DPL (100%)
b2633.7	Implement high speed relaying utilizing OPGW on Red Lion – Hope Creek 500 kV line		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS  (6.055.61%) / ATSI  (7.928.10%) / BGE (4.234.36%)  / ComEd (13.2013.14%) /  Dayton (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%) /  DPL (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL  (3.823.84%) / ME (1.881.93%) /  NEPTUNE* (0.420.45%) /  OVEC (0.080.07%) / PECO  (5.315.29%) / PENELEC  (1.901.89%) / PEPCO  (3.903.82%) / PPL (5.004.72%)  / PSEG (6.156.21%) / RE  (0.250.26%)  DFAX Allocation:  AEC (0.01%) / DPL (99.98%) /  JCPL (0.01%)
b2633.10	Interconnect the new Silver Run 230 kV substation with existing Red Lion – Cartanza and Red Lion – Cedar Creek 230 kV lines		AEC (8.01%) / BGE (1.94%) / DPL (12.99%) / JCPL (13.85%) / ME (5.88%) / NEPTUNE* (3.45%) / PECO (17.62%) / PPL (14.85%) / PSEG (20.79%) / RE (0.62%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

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

Required Ira	ansmission Enhancements Ani	nual Revenue Requirement	Responsible Customer(s)
	Rebuild Worcester –		
b2695	Ocean Pine 69 kV ckt. 1 to		DPL (100%)
02073	1400A capability summer		DI L (100%)
	emergency		
	Convert existing Preston		
b2946	69 kV substation to DPL's		DPL (100%)
02740	current design standard of		D1 L (10070)
	a 3-breaker ring bus		
	Upgrade terminal		
b2947.1	equipment at DPL's		DPL (100%)
02747.1	Naamans substation		DI L (100%)
	(Darley - Naamans 69 kV)		
	Reconductor 0.11 mile		
b2947.2	section of Darley -		DPL (100%)
	Naamans 69 kV circuit		
	Upgrade terminal		
	equipment at DPL's		
b2948	Silverside Road substation		DPL (100%)
	(Dupont Edge Moor –		
	Silver R. 69 kV)		
	Install a 30 MVAR		
	capacitor bank at DPL's		
	Cool Springs 69 kV		
b2987	substation. The capacitor		DPL (100%)
02767	bank would be installed in		DI L (100%)
	two separate 15 MVAR		
	stages allowing DPL		
	operational flexibility		
	Reconductor the Silverside		
b3143.1	Road – Darley 69 kV		DPL (100%)
	circuit		
104:55	Reconductor the Darley –		
b3143.2	Naamans 69 kV circuit		DPL (100%)
	Replace three (3) existing		
	1200 A disconnect		
h2142 2	switches with 2000 A		DDI (1000/)
b3143.3	disconnect switches and		DPL (100%)
	install three (3) new 2000		
	A disconnect switches at		
	Silverside 69 kV station		

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

rtequirea II	ansimission Emiancements Am	iuai Kevenue Kequiremeni	Responsible Customer(s)
	Replace two (2) 1200 A		
	disconnect switches with		
	2000 A disconnect		
	switches. Replace existing		
	954 ACSR and 500 SDCU		
	stranded bus with two (2)		
b3143.4	954 ACSR stranded bus.		DDI (1000/)
03143.4	Reconfigure four (4) CTs		DPL (100%)
	from 1200 A to 2000 A		
	and install two (2) new		
	2000 A disconnect		
	switches and two (2) new		
	954 ACSR stranded bus at		
	Naamans 69 kV station		
	Replace four (4) 1200 A		
	disconnect switches with		
	2000 A disconnect		
	switches. Replace existing		
	954 ACSR and 1272		
	MCM AL stranded bus		
	with two (2) 954 ACSR		
	stranded bus. Reconfigure		DPL (100%)
b3143.5	eight (8) CTs from 1200 A		
	to 2000 A and install four		
	(4) new 2000 A (310 MVA		
	SE / 351 MVA WE)		
	disconnect switches and		
	two (2) new 954 ACSR		
	(331 MVA SE / 369 MVA		
	WE) stranded bus at		
	Darley 69 kV station		
	Rebuild approx. 12 miles		
b3155	of Wye Mills –		DPL (100%)
	Stevensville line		. ,

#### SCHEDULE 12 – APPENDIX A

### (4) Jersey Central Power & Light Company

required 11a	HISTHISSION ETHIANCEMENTS	Allituat Kevenue Kequitettient	Responsible Customer(s)
b2234	260 MVAR reactor at West Wharton 230 kV		JCPL (100%)
b2270	Advance Raritan River - Replace G1047E breaker at the 230kV Substation		JCPL (100%)
b2271	Advance Raritan River - Replace G1047F breaker at the 230kV Substation		JCPL (100%)
b2272	Advance Raritan River - Replace T1034E breaker at the 230kV Substation		JCPL (100%)
b2273	Advance Raritan River - Replace T1034F breaker at the 230kV Substation		JCPL (100%)
b2274	Advance Raritan River - Replace I1023E breaker at the 230kV Substation		JCPL (100%)
b2275	Advance Raritan River - Replace I1023F breaker at the 230kV Substation		JCPL (100%)
b2289	Freneau Substation - upgrade 2.5 inch pipe to bundled 1590 ACSR conductor at the K1025 230 kV Line Terminal		JCPL (100%)
b2292	Replace the Whippany 230 kV breaker B1 (CAP) with 63kA breaker		JCPL (100%)
b2357	Replace the East Windsor 230 kV breaker 'E1' with 63kA breaker		JCPL (100%)

insmission Ennancements A	nnuai Revenue Requirement	Responsible Customer(s)
Replace transformer leads on the Glen		JCPL (100%)
Gardner 230/34.5 kV #1		JCI L (100%)
transformer		
		JCPL (100%)
#2 with 90 MVA		JCI L (10070)
Reconductor 0.9 miles of		
the Captive Plastics to		
Morris Park 34.5 kV		JCPL (100%)
circuit (397ACSR) with		
556 ACSR		
Extend 5.8 miles of 34.5		
kV circuit from North		
Branch substation to		
Lebanon substation with		JCPL (100%)
397 ACSR and install		
34.5 kV breaker at		
Lebanon substation		
Upgrade terminal		
equipment at Monroe on		
the Englishtown to		JCPL (100%)
Monroe (H34) 34.5 kV		
circuit		
Upgrade limiting		
terminal facilities at		JCPL (100%)
Feneau, Parlin, and		JCI L (10070)
Williams substations		
Upgrade the limiting		
terminal facilities at both		JCPL (100%)
Jackson and North		JCI L (100%)
Hanover		
Upgrade the V74 34.5 kV		
transmission line		JCPL (100%)
between Allenhurst and		JCI L (10070)
Elberon Substations		
	Replace transformer leads on the Glen Gardner 230/34.5 kV #1 transformer Replace Franklin 115/34.5 kV transformer #2 with 90 MVA transformer Reconductor 0.9 miles of the Captive Plastics to Morris Park 34.5 kV circuit (397ACSR) with 556 ACSR Extend 5.8 miles of 34.5 kV circuit from North Branch substation to Lebanon substation with 397 ACSR and install 34.5 kV breaker at Lebanon substation Upgrade terminal equipment at Monroe on the Englishtown to Monroe (H34) 34.5 kV circuit Upgrade limiting terminal facilities at Feneau, Parlin, and Williams substations Upgrade the limiting terminal facilities at both Jackson and North Hanover Upgrade the V74 34.5 kV transmission line between Allenhurst and	Replace transformer leads on the Glen Gardner 230/34.5 kV #1 transformer  Replace Franklin 115/34.5 kV transformer #2 with 90 MVA transformer  Reconductor 0.9 miles of the Captive Plastics to Morris Park 34.5 kV circuit (397ACSR) with 556 ACSR  Extend 5.8 miles of 34.5 kV circuit from North Branch substation to Lebanon substation with 397 ACSR and install 34.5 kV breaker at Lebanon substation Upgrade terminal equipment at Monroe on the Englishtown to Monroe (H34) 34.5 kV circuit Upgrade limiting terminal facilities at Feneau, Parlin, and Williams substations  Upgrade the limiting terminal facilities at both Jackson and North Hanover  Upgrade the V74 34.5 kV transmission line between Allenhurst and

	Required Tra	nsmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> 14.04%) / APS
			( <del>6.05</del> 5.61%) / ATSI ( <del>7.92</del> 8.10%)
			/ BGE ( <del>4.23</del> 4.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL (2.582.65%) / Dominion
		Implement high speed	( <del>12.56</del> 13.03%) / EKPC
	1.0622.6	relaying utilizing OPGW	( <del>1.941.77</del> %) / JCPL ( <del>3.82</del> 3.84%)
	b2633.6	on Deans – East Windsor	/ ME ( <del>1.88</del> 1.93%) / NEPTUNE*
		500 kV	( <del>0.42</del> 0.45) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.004.72</del> %) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			AEC (0.01%) / DPL (99.98%) /
			JCPL (0.01%)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
		Implement high speed	( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
		relaying utilizing OPGW	DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	b2633.6.1	on East Windsor - New	( <del>12.56</del> <u>13.03</u> %) / EKPC
		Freedom 500 kV	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
		Treedom 500 K	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)

<u> </u>
DFAX Allocation:
AEC (0.01%) / DPL (99.98%) /
JCPL (0.01%)

Required Tra	insmission Enhancements Ai	nnual Revenue Requirement	Responsible Customer(s)
b2676	Install one (1) 72 MVAR fast switched capacitor at the Englishtown 230 kV		JCPL (100%)
b2708	substation Replace the Oceanview 230/34.5 kV transformer #1		JCPL (100%)
b2709	Replace the Deep Run 230/34.5 kV transformer #1		JCPL (100%)
b2754.2	Install 5 miles of optical ground wire (OPGW) between Gilbert and Springfield 230 kV substations		JCPL (100%)
b2754.3	Install 7 miles of all-dielectric self-supporting (ADSS) fiber optic cable between Morris Park and Northwood 230 kV substations		JCPL (100%)
b2754.6	Upgrade relaying at Morris Park 230 kV		JCPL (100%)
b2754.7	Upgrade relaying at Gilbert 230 kV		JCPL (100%)
b2809	Install a bypass switch at Mount Pleasant 34.5 kV substation to allow the Mount Pleasant substation load to be removed from the N14 line and transfer to O769 line		JCPL (100%)
b3023	Replace West Wharton 115 kV breakers 'G943A' and 'G943B' with 40kA breakers		JCPL (100%)
b3042	Replace substation conductor at Raritan River 230 kV substation on the Kilmer line		JCPL (100%)

terminal	

Required Tra	ansmission Enhancements An	nual Revenue Requirement	Responsible Customer(s)
	Construct seven new 34.5		
	kV circuits on existing pole	;	
	lines (total of 53.5 miles),		
b3130	rebuild/reconductor two		ICDI (100%)
03130	34.5 kV circuits (total of		JCPL (100%)
	5.5 miles) and install a		
	second 115/34.5 kV		
	transformer (Werner)		
	Construct a new 34.5 kV		
b3130.1	circuit from Oceanview to		JCPL (100%)
03130.1	Allenhurst 34.5 kV (4		JCPL (100%)
	miles)		
	Construct a new 34.5 kV		
b3130.2	circuit from Atlantic to		JCPL (100%)
03130.2	Red Bank 34.5 kV (12		JCFL (100%)
	miles)		
	Construct a new 34.5 kV		
b3130.3	circuit from Freneau to		JCPL (100%)
03130.3	Taylor Lane 34.5 kV (6.5		JCI L (100%)
	miles)		
	Construct a new 34.5 kV		
b3130.4	circuit from Keyport to		JCPL (100%)
	Belford 34.5 kV (6 miles)		
	Construct a new 34.5 kV		
b3130.5	circuit from Red Bank to		JCPL (100%)
	Belford 34.5 kV (5 miles)		
	Construct a new 34.5 kV		
b3130.6	circuit from Werner to		JCPL (100%)
	Clark Street (7 miles)		
	Construct a new 34.5 kV		
b3130.7	circuit from Atlantic to		JCPL (100%)
	Freneau (13 miles)		
	Rebuild/reconductor the		
b3130.8	Atlantic – Camp Woods		JCPL (100%)
03130.8	Switch Point (3.5 miles)		3CI L (10070)
	34.5 kV circuit		
	Rebuild/reconductor the		
b3130.9	Allenhurst – Elberon (2		JCPL (100%)
	miles) 34.5 kV circuit		
b3130.10	Install 2nd 115/34.5 kV		JCPL (100%)
03130.10	transformer at Werner		JCI L (10070)

substation	

#### SCHEDULE 12 – APPENDIX A

# (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (<del>1.72</del>1.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del><u>5.61</u>%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (<del>13.20</del>13.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%)Loop the 2026 (TMI – / DPL (2.582.65%) / Dominion Hosensack 500 kV) line b2006.1.1 (<del>12.56</del>13.03%) / EKPC in to the Lauschtown (<del>1.94</del>1.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE\* (0.420.45%) / OVEC (0.080.07%) / PECO (<del>5.31</del>5.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (<del>6.15</del>6.21%) / RE (<del>0.25</del>0.26%) **DFAX Allocation:** PPL (100%) Upgrade relay at South b2006.2.1 Reading on the 1072 230 ME (100%) V line Replace the South Reading 69 kV '81342' b2006.4 ME (100%) breaker with 40kA breaker Replace the South Reading 69 kV '82842' b2006.5 ME (100%) breaker with 40kA breaker APS (8.30%) / BGE (14.70%) Install 2nd Hunterstown / DEOK (0.48%) / Dominion b2452 230/115 kV transformer (36.92%) / ME (23.85%) / PEPCO (15.75%)

## $\label{lem:mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company \ Zone \ (cont.)$

Required Transmission Ennancements		Annuai Revenue Requiremen	1 '/
b2452.1	Reconductor Hunterstown - Oxford 115 kV line		APS (8.30%) / BGE (14.70%) / DEOK (0.48%) / Dominion (36.92%) / ME (23.85%) / PEPCO (15.75%)
b2452.3	Replace the Hunterstown 115 kV breaker '96192' with 40 kA		ME (100%)
b2588	Install a 36.6 MVAR 115 kV capacitor at North Bangor substation		ME (100%)
b2637	Convert Middletown Junction 230 kV substation to nine bay double breaker configuration.		ME (100%)
b2644	Install a 28.8 MVAR 115 kV capacitor at the Mountain substation		ME (100%)
b2688.1	Lincoln Substation: Upgrade the bus conductor and replace CTs.		AEP (12.91%) / APS (19.04%)/ ATSI (1.24%) / ComEd (0.35%) / Dayton (1.45%) / DEOK (2.30%) / DL (1.11%)/ Dominion (44.85%) / EKPC (0.78%)/ PEPCO (15.85%) / RECO (0.12%)
b2688.2	Germantown Substation: Replace 138/115 kV transformer with a 135/180/224 MVA bank. Replace Lincoln 115 kV breaker, install new 138 kV breaker, upgrade bus conductor and adjust/replace CTs.		AEP (12.91%) / APS (19.04%) / ATSI (1.24%) / ComEd (0.35%) / Dayton (1.45%) / DEOK (2.30%) / DL (1.11%) / Dominion (44.85%) / EKPC (0.78%) / PEPCO (15.85%) / RECO (0.12%)

## $\label{lem:mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company \ Zone \ (cont.)$

Required Transmission Emilancements		Allitual Revenue Requiremen	
	Upgrade terminal		AEP (6.46%) / APS (8.74%) /
	equipment at		BGE (19.74%) / ComEd
b2743.4	Hunterstown 500 kV on		(2.16%) / Dayton (0.59%) /
02/43.4	the Conemaugh –		DEOK (1.02%) / DL (0.01%) /
	Hunterstown 500 kV		Dominion (39.95%) / EKPC
	circuit		(0.45%) / PEPCO (20.88%)
	Upgrade terminal		AEP (6.46%) / APS (8.74%) /
	equipment and required		BGE (19.74%) / ComEd
b2752.4	relay communication at		(2.16%) / Dayton (0.59%) /
02132.4	TMI 500 kV: on the		DEOK (1.02%) / DL (0.01%) /
	Beach Bottom – TMI		Dominion (39.95%) / EKPC
	500 kV circuit		(0.45%) / PEPCO (20.88%)
	Replace relay at West		
	Boyertown 69 kV station		
b2749	on the West Boyertown –		ME (100%)
	North Boyertown 69 kV		
	circuit		
	Upgrade bus conductor at		
	Gardners 115 kv		
b2765	substation; Upgrade bus		ME (100%)
02703	conductor and adjust CT		WIL (10070)
	ratios at Carlisle Pike 115		
	kV		
	Upgrade limiting 115 kV		
	switches on the 115 kV		
b2950	side of the 230/115 kV		ME (100%)
02730	Northwood substation		WIL (10070)
	and adjust setting on		
	limiting ZR relay		
1010	Replace bus conductor at		
b3136	Smith 115 kV substation		ME (100%)
			AED (14 400/) / ABS (9 000/) /
	Rebuild the Hunterstown		AEP (16.60%) / APS (8.09%) /
	- Lincoln 115 kV Line		BGE (2.74%) / Dayton
b3145	No. 962 (approx. 2.6		(2.00%) / DEOK (0.35%) / DL
	miles). Upgrade limiting		(1.31%) / Dominion (52.77%)
	terminal equipment at		/ EKPC (1.54%) / OVEC
	Hunterstown and Lincoln		(0.06%) / PEPCO (14.54%)

### SCHEDULE 12 – APPENDIX A

## (7) Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone

Required T	ransmission Enhancements	Annual Revenue Requiremen	nt Responsible Customer(s)
b2212	Shawville Substation: Relocate 230 kV and 115 kV controls from the generating station building to new control building		PENELEC (100%)
b2293	Replace the Erie South 115 kV breaker 'Buffalo Rd' with 40kA breaker		PENELEC (100%)
b2294	Replace the Johnstown 115 kV breaker 'Bon Aire' with 40kA breaker		PENELEC (100%)
b2302	Replace the Erie South 115 kV breaker 'French #2' with 40kA breaker		PENELEC (100%)
b2304	Replace the substation conductor and switch at South Troy 115 kV substation		PENELEC (100%)
b2371	Install 75 MVAR capacitor at the Erie East 230 kV substation		PENELEC (100%)
b2441	Install +250/-100 MVAR SVC at the Erie South 230 kV station		PENELEC (100%)
b2442	Install three 230 kV breakers on the 230 kV side of the Lewistown #1, #2 and #3 transformers		PENELEC (100%)
b2450	Construct a new 115 kV line from Central City West to Bedford North		PENELEC (100%)
b2463	Rebuild and reconductor 115 kV line from East Towanda to S. Troy and upgrade terminal equipment at East Towanda, Tennessee Gas and South Troy		PENELEC (100%)

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Construct Warren 230 kV		
b2494	ring bus and install a		PENELEC (100%)
02171	second Warren 230/115		TENEELE (10070)
	kV transformer		
	Reconductor the North		
	Meshoppen – Oxbow- Lackawanna 230 kV		DENIEL EC (05 4100 000/) /
b2552.1			PENELEC (95.4199.00%) /
	circuit and upgrade		PPL (4.59 <u>1.00</u> %)
	terminal equipment (MAIT portion)		
	Replace the Warren 115		
b2573	kV 'B12' breaker with a		PENELEC (100%)
02373	40kA breaker		TENEEEC (100%)
	Reconfigure Pierce Brook		
	345 kV station to a ring		
b2587	bus and install a 125		PENELEC (100%)
02007	MVAR shunt reactor at		121(2226 (100/0)
	the station		
	Replace relays at East		
h2621	Towanda and East Sayre		DENIEL EC (1000/)
b2621	115 kV substations		PENELEC (100%)
	(158/191 MVA SN/SE)		
	Replace wave trap, bus		
	conductor and relay at		
b2677	Hilltop 115 kV substation.		PENELEC (100%)
	Replace relays at Prospect		
	and Cooper substations		
	Convert the East Towarda		
b2678	115 kV substation to		PENELEC (100%)
	breaker and half		` ,
	configuration		
b2670	Install a 115 kV Venango Jct. line breaker at		DENIELEC (100%)
b2679	Edinboro South		PENELEC (100%)
b2680	Install a 115 kV breaker		
	on Hooversville #1 115/23		PENELEC (100%)
	kV transformer		1 ENLLE (10070)
	Install a 115 kV breaker		
b2681	on the Eclipse #2 115/34.5		PENELEC (100%)
02001	kV transformer		1 11 (1111)
	K + danstormer		

required 1	Talishiission Enhancements Ai	iliuai Keveliue Kequilellielli	Responsible Customer(s)
b2682	Install two 21.6 MVAR capacitors at the Shade Gap 115 kV substation		PENELEC (100%)
b2683	Install a 36 MVAR 115 kV capacitor and associated equipment at Morgan Street substation		PENELEC (100%)
b2684	Install a 36 MVAR 115 kV capacitor at Central City West substation		PENELEC (100%)
b2685	Install a second 115 kV 3000A bus tie breaker at Hooversville substation		PENELEC (100%)
b2735	Replace the Warren 115 kV 'NO. 2 XFMR' breaker with 40kA breaker		PENELEC (100%)
b2736	Replace the Warren 115 kV 'Warren #1' breaker with 40kA breaker		PENELEC (100%)
b2737	Replace the Warren 115 kV 'A TX #1' breaker with 40kA breaker		PENELEC (100%)
b2738	Replace the Warren 115 kV 'A TX #2' breaker with 40kA breaker		PENELEC (100%)
b2739	Replace the Warren 115 kV 'Warren #2' breaker with 40kA breaker		PENELEC (100%)
b2740	Revise the reclosing of the Hooversville 115 kV 'Ralphton' breaker		PENELEC (100%)
b2741	Revise the reclosing of the Hooversville 115 kV 'Statler Hill' breaker		PENELEC (100%)

Required 1	ransmission Enhancements Ai	nnual Revenue Requirement	Responsible Customer(s)
b2743.2	Tie in new Rice substation to Conemaugh – Hunterstown 500 kV		AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK (1.02%) / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)
b2743.3	Upgrade terminal equipment at Conemaugh 500 kV on the Conemaugh – Hunterstown 500 kV circuit		AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK (1.02%) / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)
b2748	Install two 28 MVAR capacitors at Tiffany 115 kV substation		PENELEC (100%)
b2767	Construct a new 345 kV breaker string with three (3) 345 kV breakers at Homer City and move the North autotransformer connection to this new breaker string		PENELEC (100%)
b2803	Reconductor 3.7 miles of the Bethlehem – Leretto 46 kV circuit and replace terminal equipment at Summit 46 kV		PENELEC (100%)
b2804	Install a new relay and replace 4/0 CU bus conductor at Huntingdon 46 kV station, on the Huntingdon – C tap 46 kV circuit		PENELEC (100%)
b2805	Install a new relay and replace 4/0 CU & 250 CU substation conductor at Hollidaysburg 46 kV station, on the Hollidaysburg – HCR Tap 46 kV circuit		PENELEC (100%)

required 1	Tansmission Emancements Ai	inuai Kevenue Kequitement	Responsible Customer(s)
	Install a new relay and		
	replace meter at the		
b2806	Raystown 46 kV		PENELEC (100%)
02800	substation, on the		TENELLE (100%)
	Raystown – Smithfield 46		
	kV circuit		
	Replace the CHPV and		
	CRS relay, and adjust the		
	IAC overcurrent relay trip		
b2807	setting; or replace the relay		PENELEC (100%)
	at Eldorado 46 kV		
	substation, on the Eldorado		
	<ul> <li>Gallitzin 46 kV circuit</li> </ul>		
	Adjust the JBC overcurrent		
	relay trip setting at		
	Raystown 46 kV, and		
	replace relay and 4/0 CU		
b2808	bus conductor at		PENELEC (100%)
	Huntingdon 46 kV		
	substations, on the		
	Raystown – Huntingdon 46		
	kV circuit		
	Replace Seward 115 kV		
b2865	breaker "Jackson Road"		PENELEC (100%)
	with 63kA breaker		
	Replace Seward 115 kV		
b2866	breaker "Conemaugh N."		PENELEC (100%)
	with 63kA breaker		
	Replace Seward 115 kV		
b2867	breaker "Conemaugh S."		PENELEC (100%)
	with 63kA breaker		, , ,
	Replace Seward 115 kV		
b2868	breaker "No.8 Xfmr" with		PENELEC (100%)
2200	63kA breaker		, ,
	Install two 345 kV 80		
b2944	MVAR shunt reactors at		PENELEC (100%)
	Mainesburg station		
		<u> </u>	

required 1	ransmission Emancements Am	iuai Revenue Requirement	Responsible Customer(s)
b2951	Seward, Blairsville East, Shelocta work		PENELEC (100%)
b2951.1	Upgrade Florence 115 kV line terminal equipment at Seward SS		PENELEC (100%)
b2951.2	Replace Blairsville East / Seward 115 kV line tuner, coax, line relaying and carrier set at Shelocta SS		PENELEC (100%)
b2951.3	Replace Seward / Shelocta 115 kV line CVT, tuner, coax, and line relaying at Blairsville East SS		PENELEC (100%)
b2952	Replace the North Meshoppen #3 230/115 kV transformer eliminating the old reactor and installing two breakers to complete a 230 kV ring bus at North Meshoppen		PENELEC (100%)
b2953	Replace the Keystone 500 kV breaker "NO. 14 Cabot" with 50kA breaker		PENELEC (100%)
b2954	Replace the Keystone 500 kV breaker "NO. 16 Cabot" with 50kA breaker		PENELEC (100%)
b2984	Reconfigure the bus at Glory and install a 50.4 MVAR 115 kV capacitor		PENELEC (100%)
b3007.2	Reconductor the Blairsville East to Social Hall 138 kV line and upgrade terminal equipment - PENELEC portion. 4.8 miles total. The new conductor will be 636 ACSS replacing the existing 636 ACSR conductor. At Blairsville East, the wave trap and breaker disconnects will be replaced		PENELEC (100%)

required 1	Tansinission Enhancements Anno	iai Kevenue Kequirement	Responsible Customer(s)
	Upgrade Blairsville East 138/115 kV transformer		
	terminals. This project is an		
	upgrade to the tap of the		
b3008	Seward – Shelocta 115 kV		PENELEC (100%)
	line into Blairsville		, ,
	substation. The project will		
	replace the circuit breaker		
	and adjust relay settings		
	Upgrade Blairsville East 115		
b3009	kV terminal equipment.		PENELEC (100%)
03009	Replace 115 kV circuit		FENELEC (100%)
	breaker and disconnects		
	Replace the existing Shelocta		
b3014	230/115 kV transformer and		PENELEC (100%)
	construct a 230 kV ring bus		
	Upgrade terminal equipment		
	at Corry East 115 kV to		
b3016	increase rating of Four Mile		PENELEC (100%)
	to Corry East 115 kV line.		
	Replace bus conductor		
	Rebuild Glade to Warren 230		
	kV line with hi-temp		
	conductor and substation		ATSI (61.61%) / PENELEC
b3017.1	terminal upgrades. 11.53		( <del>38.39</del> 100%)
	miles. New conductor will be		(30.37 100 /0)
	1033 ACSS. Existing		
	conductor is 1033 ACSR		
	Glade substation terminal		
b3017.2	upgrades. Replace bus		ATSI (61.61%) / PENELEC
	conductor, wave traps, and		( <del>38.39</del> <u>100</u> %)
	relaying		
	Warren substation terminal		
b3017.3	upgrades. Replace bus		ATSI (61.61%) / PENELEC
	conductor, wave traps, and		( <del>38.39</del> <u>100</u> %)
	relaying		
1.0000	Replace Saxton 115 kV		
b3022	breaker 'BUS TIE' with a		PENELEC (100%)
	40kA breaker		

Uggrade terminal equipment at Corry East 115 kV to increase rating of Warren to Corry East 115 kV line. Replace bus conductor Install one 115 kV 36  b3043 MVAR capacitor at West Fall 115 kV substation  Replace the Blairsville East 138/115 kV transformer and associated equipment such as breaker disconnects and bus conductor with the conductor of	Required T	ransmission Enhancements Annu	ual Revenue Requirement	Responsible Customer(s)
Corry East 115 kV line. Replace bus conductor Install one 115 kV 36  b3043 MVAR capacitor at West Fall 115 kV substation Replace the Blairsville East 138/115 kV transformer and associated equipment such as breaker disconnects and bus conductor Reconductor the Franklin pike B – Wayne 115 kV line (6.78 miles) Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  Construct 4-breaker 115 kV ring bus at Geneva Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation Install one (1) 13.2 MVAR b3154 HVAR PENELEC (100%) PENELEC (100%)		at Corry East 115 kV to		
Replace bus conductor  Install one 115 kV 36 MVAR capacitor at West Fall 115 kV substation  Replace the Blairsville East 138/115 kV transformer and associated equipment such as breaker disconnects and bus conductor  Reconductor the Franklin Pike B – Wayne 115 kV line (6.78 miles)  Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  b3082  Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Jackson Road substation Install one (1) 13.2 MVAR b3154  PENELEC (100%)  PENELEC (100%)	b3024	increase rating of Warren to		PENELEC (100%)
b3043 MVAR capacitor at West Fall 115 kV substation Replace the Blairsville East 138/115 kV transformer and associated equipment such as breaker disconnects and bus conductor  Reconductor the Franklin pike B — Wayne 115 kV line (6.78 miles) Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  b3082 Construct 4-breaker 115 kV ring bus at Geneva Rebuild 20 miles of the East Towanda — North Meshoppen 115 kV line Upgrade bus conductor and relay panels of the Jackson Road — Narty Glo 46 kV SJN line Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation Install one (1) 13.2 MVAR b3154  PENELEC (100%)		Corry East 115 kV line.		
b3043 MVAR capacitor at West Fall 115 kV substation  Replace the Blairsville East 138/115 kV transformer and associated equipment such as breaker disconnects and bus conductor  Reconductor the Franklin  b3077 Pike B – Wayne 115 kV line (6.78 miles)  Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154 PENELEC (100%)		Replace bus conductor		
Fall 115 kV substation  Replace the Blairsville East 138/115 kV transformer and associated equipment such as breaker disconnects and bus conductor  Reconductor the Franklin Pike B – Wayne 115 kV line (6.78 miles)  Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  b3082  Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East Townda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154  B3154  PENELEC (100%)		Install one 115 kV 36		
Replace the Blairsville East 138/115 kV transformer and associated equipment such as breaker disconnects and bus conductor  Reconductor the Franklin pike B – Wayne 115 kV line (6.78 miles)  Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus art Venango Junction  b3082  Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)	b3043	MVAR capacitor at West		PENELEC (100%)
b3073 associated equipment such as breaker disconnects and bus conductor  Reconductor the Franklin b3077 Pike B – Wayne 115 kV line (6.78 miles)  Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  b3082 Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East  b3137 Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at A Nanty Glo substation  Install one (1) 13.2 MVAR b3154 46 kV capacitor at the Logan		Fall 115 kV substation		
b3073 associated equipment such as breaker disconnects and bus conductor  Reconductor the Franklin  b3077 Pike B – Wayne 115 kV line (6.78 miles)  Reconductor the 138 kV bus and replace the line trap, relays Morgan Street.  Reconductor the 138 kV bus at Venango Junction  b3082 Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East  b3137 Towanda – North  Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation conductor on the 46 kV Jackson Road line exit at Annty Glo substation  Install one (1) 13.2 MVAR b3154  b3154 46 kV capacitor at the Logan		Replace the Blairsville East		
breaker disconnects and bus conductor  Reconductor the Franklin Pike B – Wayne 115 kV line (6.78 miles)  Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  b3082  Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation conductor on the 46 kV Jackson Road line exit at Annty Glo substation  Install one (1) 13.2 MVAR b3154  Barbara PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)		138/115 kV transformer and		
conductor  Reconductor the Franklin Pike B – Wayne 115 kV line (6.78 miles)  Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154  BY DENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)	b3073	associated equipment such as		PENELEC (100%)
Reconductor the Franklin Pike B – Wayne 115 kV line (6.78 miles)  Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154  BY PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)		breaker disconnects and bus		
b3077 Pike B – Wayne 115 kV line (6.78 miles)  Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  b3082 Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at A Nanty Glo substation  Install one (1) 13.2 MVAR  b3154 46 kV capacitor at the Logan  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)		conductor		
Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  b3082 Construct 4-breaker 115 kV ring bus at Geneva Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154  Reconductor the 138 kV bus and replay Morgan Street. PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)		Reconductor the Franklin		
Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  b3082  Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation conductor on the 46 kV Jackson Road substation conductor on the 46 kV Jackson Road line exit at Jackson Road line exit at Alatty Glo substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154  b3154  Reconductor the line trap, PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)	b3077	Pike B – Wayne 115 kV line		PENELEC (100%)
and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  b3082  Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154  and replace the line trap, relays Morgan Street.  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)		(6.78 miles)		
b3078 relays Morgan Street. Reconductor the 138 kV bus at Venango Junction  b3082 Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East  b3137 Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR  b3154 46 kV capacitor at the Logan		Reconductor the 138 kV bus		
Reconductor the 138 kV bus at Venango Junction  b3082		and replace the line trap,		
at Venango Junction    B3082   Construct 4-breaker 115 kV ring bus at Geneva	b3078	relays Morgan Street.		PENELEC (100%)
b3082 Construct 4-breaker 115 kV ring bus at Geneva  Rebuild 20 miles of the East  Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation Conductor on the 46 kV Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR  b3154 46 kV capacitor at the Logan		Reconductor the 138 kV bus		
b3082 ring bus at Geneva  Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation conductor on the 46 kV Jackson Road line exit at Salvatation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154  Rebuild 20 miles of the East PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)  PENELEC (100%)		at Venango Junction		
Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation conductor on the 46 kV Jackson Road line exit at at Nanty Glo substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR  46 kV capacitor at the Logan	h2092	Construct 4-breaker 115 kV		DENELEC (100%)
b3137 Towanda – North Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154 46 kV capacitor at the Logan	03082	ring bus at Geneva		PENELEC (100%)
Meshoppen 115 kV line  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation  Upgrade line relaying and substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR  b3154  Meshoppen 115 kV line  PENELEC (100%)  PENELEC (100%)		Rebuild 20 miles of the East		
b3144  Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR  b3154  Upgrade line relaying and substation  Install one (1) 13.2 MVAR  46 kV capacitor at the Logan  PENELEC (100%)	b3137	Towanda – North		PENELEC (100%)
b3144 relay panels of the Jackson Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154 46 kV capacitor at the Logan  PENELEC (100%)		Meshoppen 115 kV line		
b3144.1 Road – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR  b3154 46 kV capacitor at the Logan  PENELEC (100%)  PENELEC (100%)		Upgrade bus conductor and		
Boad – Nanty Glo 46 kV SJN line  Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR  b3154  Break Penellec (100%)  PENELEC (100%)	h2144	relay panels of the Jackson		DENIEL EC (100%)
b3144.1 Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR 46 kV capacitor at the Logan  PENELEC (100%)  PENELEC (100%)	03144	Road – Nanty Glo 46 kV		PENELEC (100%)
b3144.1 substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154 46 kV capacitor at the Logan  PENELEC (100%)  PENELEC (100%)		SJN line		
b3144.1  46 kV Nanty Glo line exit at Jackson Road substation  Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154  46 kV capacitor at the Logan  PENELEC (100%)  PENELEC (100%)		Upgrade line relaying and		
b3144.2 Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR  b3154 46 kV capacitor at the Logan  PENELEC (100%)	h3144 1			PENELEC (100%)
Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR  b3154  Upgrade line relaying and PENELEC (100%)  PENELEC (100%)	03144.1	46 kV Nanty Glo line exit at		TENELLE (100%)
b3144.2 substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR b3154 46 kV capacitor at the Logan  PENELEC (100%)		Jackson Road substation		
46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR  b3154 46 kV capacitor at the Logan  PENELEC (100%)  PENELEC (100%)				
46 kV Jackson Road line exit at Nanty Glo substation  Install one (1) 13.2 MVAR  b3154 46 kV capacitor at the Logan  PENELEC (100%)	h3144.2			DENELEC (100%)
Install one (1) 13.2 MVAR b3154 46 kV capacitor at the Logan PENELEC (100%)	05144.2	46 kV Jackson Road line exit		FENELLE (100%)
b3154 46 kV capacitor at the Logan PENELEC (100%)		at Nanty Glo substation		
		Install one (1) 13.2 MVAR		
substation	b3154	46 kV capacitor at the Logan		PENELEC (100%)
		substation		

### SCHEDULE 12 – APPENDIX A

### (8) PECO Energy Company

Required To	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
_	Replace Waneeta 138 kV		
b2130	breaker '15' with 63 kA		PECO (100%)
	rated breaker		
	Replace Waneeta 138 kV		
b2131	breaker '35' with 63 kA		PECO (100%)
	rated breaker		
	Replace Waneeta 138 kV		
b2132	breaker '875' with 63 kA		PECO (100%)
	rated breaker		
	Replace Waneeta 138 kV		
b2133	breaker '895' with 63 kA		PECO (100%)
	rated breaker		
	Plymouth Meeting 230		
b2134	kV breaker '115' with 63		PECO (100%)
	kA rated breaker		
	Install a second		
b2222	Eddystone 230/138 kV		PECO (100%)
	transformer		
	Replace the Eddystone		
b2222.1	138 kV #205 breaker with		PECO (100%)
	63kA breaker		
	Increase Rating of		
b2222.2	Eddystone #415 138kV		PECO (100%)
	Breaker		
b2236	50 MVAR reactor at		PECO (100%)
02230	Buckingham 230 kV		1200 (10070)
	Replace Whitpain 230 kV		
b2527	breaker '155' with 80kA		PECO (100%)
	breaker		
	Replace Whitpain 230 kV		
b2528	breaker '525' with 80kA		PECO (100%)
	breaker		
b2529	Replace Whitpain 230 kV		<b>77.60</b> (1991)
	breaker '175' with 80 kA		PECO (100%)
	breaker		
	Replace terminal		
10710	equipment inside		PEGO (1000)
b2549	Chichester substation on		PECO (100%)
	the 220-36 (Chichester –		
	Eddystone) 230 kV line		

Required Tr	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2550	Replace terminal equipment inside Nottingham substation on the 220-05 (Nottingham – Daleville- Bradford) 230 kV line		PECO (100%)
b2551	Replace terminal equipment inside Llanerch substation on the 130-45 (Eddystone to Llanerch) 138 kV line		PECO (100%)
b2572	Replace the Peach Bottom 500 kV '#225' breaker with a 63kA breaker		PECO (100%)
b2694	Increase ratings of Peach Bottom 500/230 kV transformer to 1479 MVA normal/1839 MVA emergency		AEC (3.97%)/ AEP (5.77%)/ APS (4.27%)/ ATSI (6.15%)/ BGE (1.63%)/ ComEd (0.72%)/ Dayton (1.06%)/ DEOK (1.97%)/ DL (2.25%)/ Dominion (0.35%)/ DPL (14.29%)/ ECP (0.69%)/ EKPC (0.39%)/ HTP (0.96%)/ JCPL (6.84%) MetEd (3.28%)/ Neptune (2.14%)/ PECO (16.42%)/ PENELEC (3.94%)/ PPL (8.32%)/ PSEG (14.13%)/ RECO (0.44%)
b2752.2	Tie in new Furnace Run substation to Peach Bottom – TMI 500 kV		AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK (1.02%) / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)
b2752.3	Upgrade terminal equipment and required relay communication at Peach Bottom 500 kV: on the Beach Bottom – TMI 500 kV circuit		AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK (1.02%) / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share
			Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI
			( <del>7.92</del> <u>8.10</u> %) / BGE
			(4.23 <u>4.36</u> %) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL
			( <del>1.68</del> <u>1.73</u> %) / DPL
			( <del>2.58</del> <u>2.65</u> %) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
			( <del>1.94</del> <u>1.77</u> %) / JCPL
			( <del>3.82</del> 3.84%) / ME
	Upgrade substation		( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	equipment at Peach		( <del>0.42</del> <u>0.45</u> %) / OVEC
b2766.2	Bottom 500 kV to		( <del>0.08</del> <u>0.07</u> %) / PECO
02700.2	increase facility rating to		( <del>5.31</del> <u>5.29</u> %) / PENELEC
	2826 MVA normal and		( <del>1.90</del> <u>1.89</u> %) / PEPCO
	3525 MVA emergency		( <del>3.90</del> <u>3.82</u> %) / PPL
			( <del>5.00</del> 4.72%) / PSEG
			( <del>6.15</del> <u>6.21</u> %) / RE
		<u> </u>	( <del>0.25</del> <u>0.26</u> %)
.1			DFAX Allocation:
			AEC ( <del>1.12</del> 3.52%) / <u>APS</u>
			(9.95%) / ATSI
			( <del>6.83</del> 10.68%)/BGE
			( <del>9.41<u>6.92</u>%) / DPL</del>
			( <del>6.56</del> 16.32%) / JCPL
			( <del>17.79</del> <u>11.32</u> %)/
			NEPTUNE* (2.001.22%)/
			<u>PENELEC (2.30%) /</u>
			PEPCO ( <del>19.80</del> <u>12.59</u> %) /
			PSEG ( <del>35.05</del> <u>24.22</u> %) / RE
			( <del>1.44<u>0.96</u>%)</del>

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2774	Reconductor the Emilie - Falls 138 kV line, and replace station cable and relay		PECO (100%)
b2775	Reconductor the Falls - U.S. Steel 138 kV line		PECO (100%)
b2850	Replace the Waneeta 230 kV "285" with 63kA breaker		PECO (100%)
b2852	Replace the Chichester 230 kV "195" with 63kA breaker		PECO (100%)
b2854	Replace the North Philadelphia 230 kV "CS 775" with 63kA breaker		PECO (100%)
b2855	Replace the North Philadelphia 230 kV "CS 885" with 63kA breaker		PECO (100%)
b2856	Replace the Parrish 230 kV "CS 715" with 63kA breaker		PECO (100%)
b2857	Replace the Parrish 230 kV "CS 825" with 63kA breaker		PECO (100%)
b2858	Replace the Parrish 230 kV "CS 935" with 63kA breaker		PECO (100%)
b2859	Replace the Plymouth Meeting 230 kV "215" with 63kA breaker		PECO (100%)
b2860	Replace the Plymouth Meeting 230 kV "235" with 63kA breaker		PECO (100%)
b2861	Replace the Plymouth Meeting 230 kV "325" with 63kA breaker		PECO (100%)
b2862	Replace the Grays Ferry 230 kV "705" with 63kA breaker		PECO (100%)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2863	Replace the Grays Ferry 230 kV "985" with 63kA breaker		PECO (100%)
b2864	Replace the Grays Ferry 230 kV "775" with 63kA breaker		PECO (100%)
b2923	Replace the China Tap 230 kV 'CS 15' breaker with a 63 kA breaker		PECO (100%)
b2924	Replace the Emilie 230 kV 'CS 15' breaker with 63 kA breaker		PECO (100%)
b2925	Replace the Emilie 230 kV 'CS 25' breaker with 63 kA breaker		PECO (100%)
b2926	Replace the Chichester 230 kV '215' breaker with 63 kA breaker		PECO (100%)
b2927	Replace the Plymouth Meeting 230 kV '125' breaker with 63 kA breaker		PECO (100%)
b2985	Replace the 230 kV CB #225 at Linwood Substation (PECO) with a double circuit breaker (back to back circuit breakers in one device)		PECO (100%)
b3041	Peach Bottom – Furnace Run 500 kV terminal equipment		PECO (100%)
b3120	Replace the Whitpain 230 kV breaker "125" with a 63 kA breaker		PECO (100%)
b3138	Move 2 MVA load from the Roxborough to Bala substation. Adjust the tap setting on the Master 138/69 kV transformer #2		PECO (100%)
b3146	Upgrade the Richmond 69 kV breaker "140" with 40		PECO (100%)

kA breaker		

#### SCHEDULE 12 – APPENDIX A

#### (9) PPL Electric Utilities Corporation

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace the Blooming b1813.12 Grove 230 kV breaker PPL (100%) 'Peckville' Rebuild and reconductor 2.6 miles of b2223 PPL (100%) the Sunbury - Dauphin 69 kV circuit Add a 2nd 150 MVA b2224 230/69 kV transformer PPL (100%) at Springfield **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (<del>14.18</del>14.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion 150 MVAR shunt (<del>12.56</del>13.03%) / EKPC (<del>1.94</del>1.77%) / JCPL (<del>3.82</del>3.84%) b2237 reactor at Alburtis 500 / ME (<del>1.88</del><u>1.93</u>%) / NEPTUNE\* kV (<del>0.42</del>0.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (<del>1.90</del>1.89%) / PEPCO (<del>3.90</del>3.82%) / PPL (<del>5.00</del>4.72%) / PSEG (6.156.21%) / RE (0.250.26%)**DFAX Allocation:** PPL (100%) 100 MVAR shunt b2238 PPL (100%) reactor at Elimsport 230

<sup>\*</sup> Neptune Regional Transmission System, LLC

rtequirea	Transmission Emiancements	Timaar Revenue Requirer	nent Responsible Customer(s)
b2269	Rebuild approximately 23.7 miles of the Susquehanna - Jenkins 230kV circuit. This replaces a temporary SPS that is already planned to mitigate the violation until this solution is implemented		PPL (100%)
b2282	Rebuild the Siegfried- Frackville 230 kV line		PPL (100%)
b2406.1	Rebuild Stanton- Providence 69 kV 2&3 9.5 miles with 795 SCSR		PPL (100%)
b2406.2	Reconductor 7 miles of the Lackawanna - Providence 69 kV #1 and #2 with 795 ACSR		PPL (100%)
b2406.3	Rebuild SUB2 Tap 1 (Lackawanna - Scranton 1) 69 kV 1.5 miles 556 ACSR		PPL (100%)
b2406.4	Rebuild SUB2 Tap 2 (Lackawanna - Scranton 1) 69 kV 1.6 miles 556 ACSR		PPL (100%)
b2406.5	Create Providence - Scranton 69 kV #1 and #2, 3.5 miles with 795 ACSR		PPL (100%)
b2406.6	Rebuild Providence 69 kV switchyard		PPL (100%)
b2406.7	Install 2 - 10.8 MVAR capacitors at EYNO 69 kV		PPL (100%)
b2406.8	Rebuild Stanton 230 kV yard		PPL (100%)

Required	Transmission Ennancements	S Annual Revenue Requirement Responsible Customer(s)	
b2446	Replace wave trap and protective relays at Montour		PPL (100%)
b2447	Replace wave trap and protective relays at Montour		PPL (100%)
b2448	Install a 2nd Sunbury 900MVA 500-230kV transformer and associated equipment		PPL (100%)
b2552.2	Reconductor the North Meshoppen - Oxbow – Lackawanna 230 kV circuit and upgrade terminal equipment (PPL portion)		PENELEC (95.4398.84%) / PPL (4.571.16%)
b2574	Replace the Sunbury 230 kV 'MONTOUR NORT' breaker with a 63kA breaker		PPL (100%)
b2690	Reconductor two spans of the Graceton – Safe Harbor 230 kV transmission line. Includes termination point upgrades		PPL (100%)
b2691	Reconductor three spans limiting Brunner Island – Yorkana 230 kV line, add 2 breakers to Brunner Island switchyard, upgrade associated terminal equipment		PPL (100%)

Required	Transmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
		/ BGE (4.23 <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> <u>2.15</u> %) / DEOK
		( <del>3.18</del> 3.23%) / DL ( <del>1.68</del> 1.73%) /
		DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	Add a 200 MVAR shunt	( <del>12.56</del> <u>13.03</u> %) / EKPC
b2716	reactor at Lackawanna	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
	500 kV substation	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		( <del>0.42</del> <u>0.45</u> %) / OVEC
		( <del>0.08</del> <u>0.07</u> %) / PECO
		( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		PPL (100%)
	Install 7 miles of optical	
	ground wire (OPGW)	
b2754.1	between Gilbert and	PPL (100%)
	Springfield 230 kV	
	substations	
	Use ~ 40 route miles of	
	existing fibers on PPL	
b2754.4	230 kV system to	PPL (100%)
	establish direct fiber	
	circuits	
b2754.5	Upgrade relaying at	PPL (100%)
02134.3	Martins Creek 230 kV	1112 (10070)
b2756	Install 2% reactors at	PPL (100%)
02730	Martins Creek 230 kV	FFL (10070)
	Expand existing	
b2813	Lycoming 69 kV yard to	PPL (100%)
02013	double bus double	FFL (100%)
	breaker arrangement	

<sup>\*</sup> Neptune Regional Transmission System, LLC

	required	Transmission Emiancements	Amuai Revenue Requirement Responsible Eustomer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
		Reconfigure/Expand the	DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
		Lackawanna 500 kV	( <del>12.56</del> <u>13.03</u> %) / EKPC
	b2824	substation by adding a	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
		third bay with three	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		breakers	( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.004.72</del> %) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
		200/50177	PPL (100%)
		Build a new 230/69 kV	
		substation by tapping the	
	b2838	Montour – Susquehanna	DDI (1000/)
		230 kV double circuits	PPL (100%)
		and Berwick – Hunlock	
		& Berwick – Colombia	
		69 kV circuits	
	1.2070	Replace Martins Creek	DDI (1000()
	b2979	230 kV circuit breakers	PPL (100%)
		with 80 kA rating	

<sup>\*</sup> Neptune Regional Transmission System, LLC

#### SCHEDULE 12 – APPENDIX A

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

Required Tra	ansmission Enhancements	Annual Revenue Requiremer	nt Responsible Customer(s)
b2218	Rebuild 4 miles of overhead line from Edison - Meadow Rd - Metuchen (Q 1317)		PSEG (100%)
b2239	50 MVAR reactor at Saddlebrook 230 kV		PSEG (100%)
b2240	50 MVAR reactor at Athenia 230 kV		PSEG (100%)
b2241	50 MVAR reactor at Bergen 230 kV		PSEG (100%)
b2242	50 MVAR reactor at Hudson 230 kV		PSEG (100%)
b2243	Two 50 MVAR reactors at Stanley Terrace 230 kV		PSEG (100%)
b2244	50 MVAR reactor at West Orange 230 kV		PSEG (100%)
b2245	50 MVAR reactor at Aldene 230 kV		PSEG (100%)
b2246	150 MVAR reactor at Camden 230 kV		PSEG (100%)
b2247	150 MVAR reactor at Gloucester 230 kV		PSEG (100%)
b2248	50 MVAR reactor at Clarksville 230 kV		PSEG (100%)
b2249	50 MVAR reactor at Hinchmans 230 kV		PSEG (100%)
b2250	50 MVAR reactor at Beaverbrook 230 kV		PSEG (100%)
b2251	50 MVAR reactor at Cox's Corner 230 kV		PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

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.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Eliminate the Sewaren 138 kV bus by installing a new b2276 PSEG (100%) 230 kV bay at Sewaren 230 kV Convert the two 138 kV circuits from Sewaren -Metuchen to 230 kV b2276.1 PSEG (100%) circuits including Lafayette and Woodbridge substation Reconfigure the Metuchen 230 kV station to b2276.2 PSEG (100%) accommodate the two converted circuits Replace disconnect switches at Kilmer, Lake Nilson and Greenbrook b2290 PSEG (100%) 230 kV substations on the Raritian River - Middlesex (I-1023) circuit Replace circuit switcher at Lake Nelson 230 kV b2291 substation on the Raritian PSEG (100%) River - Middlesex (W-1037) circuit Replace the Salem 500 kV b2295 breaker 10X with 63kA PSEG (100%) breaker Install all 69kV lines to interconnect Plainfield, Greenbrook, and b2421 PSEG (100%) Bridgewater stations and establish the 69kV network Install two 18MVAR capacitors at Plainfield b2421.1 PSEG (100%) and S. Second St substation

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Tr	ansmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
b2421.2	Install a second four (4) breaker 69kV ring bus at Bridgewater Switching Station	PSEG (100%)
b2436.10	Convert the Bergen – Marion 138 kV path to double circuit 345 kV and associated substation upgrades	Load-Ratio Share Allocation:  AEC (4.721.71%) / AEP  (14.1814.04%) / APS  (6.055.61%) / ATSI (7.928.10%)  / BGE (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%) /  DPL (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL (3.823.84%)  / ME (1.881.93%) / NEPTUNE*  (0.420.45%) / OVEC  (0.080.07%) / PECO  (5.315.29%) / PENELEC  (1.901.89%) / PEPCO  (3.903.82%) / PPL (5.004.72%) /  PSEG (6.156.21%) / RE  (0.250.26%)  DFAX Allocation:  PSEG (100%)
b2436.21	Convert the Marion - Bayonne "L" 138 kV circuit to 345 kV and any associated substation upgrades	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP

	( <del>0.25</del> <u>0.26</u> %)
	DFAX Allocation:
	PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
		( <del>14.18</del> 14. <del>04</del> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
		/ BGE (4.23 <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> <u>2.15</u> %) / DEOK
		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
	Convert the Marion -	DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	Bayonne "C" 138 kV	( <del>12.56</del> <u>13.03</u> %) / EKPC
b2436.22	circuit to 345 kV and any	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
02430.22	associated substation upgrades	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
		( <del>0.42</del> <u>0.45</u> %) / OVEC
		( <del>0.08</del> <u>0.07</u> %) / PECO
		( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
IJ		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		PSEG ( <del>96.06</del> <u>96.17</u> %) / RE
		( <del>3.94</del> <u>3.83</u> %)
,	Construct a new Bayway –	
b2436.33	Bayonne 345 kV circuit	PSEG (96.0696.17%) / RE
	and any associated	( <del>3.94</del> <u>3.83</u> %)
	substation upgrades	
	Construct a new North	DCEC (06 0606 170/) / DE
b2436.34	Ave – Bayonne 345 kV	PSEG (96.0696.17%) / RE
	circuit and any associated	( <del>3.94</del> <u>3.83</u> %)
	substation upgrades	

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Construct a new North Ave - Airport 345 kV b2436.50 PSEG (100%) circuit and any associated substation upgrades Relocate the underground portion of North Ave -Linden "T" 138 kV circuit PSEG (96.0696.17%) / RE b2436.60 to Bayway, convert it to (3.943.83%)345 kV, and any associated substation upgrades Construct a new Airport -Bayway 345 kV circuit b2436.70 PSEG (100%) and any associated substation upgrades **Load-Ratio Share Allocation:** AEC (1.721.71%) / AEP (14.1814.04%) / APS (<del>6.05</del>5.61%) / ATSI (<del>7.92</del>8.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (<del>3.18</del>3.23%) / DL (<del>1.68</del>1.73%) Relocate the overhead / DPL (2.582.65%) / Dominion portion of Linden - North (12.5613.03%) / EKPC Ave "T" 138 kV circuit to b2436.81 (<del>1.94</del>1.77%) / JCPL Bayway, convert it to 345 (3.823.84%) / ME (1.881.93%) kV, and any associated / NEPTUNE\* (<del>0.42</del><u>0.</u>45%) / substation upgrades OVEC (0.080.07%) / PECO (<del>5.31</del>5.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (<del>5.00</del>4.72%) / PSEG (<del>6.15</del>6.21%) / RE (<del>0.25</del>0.26%) **DFAX Allocation:** PSEG (96.0696.17%) / RE (3.943.83%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Tra	ansmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
		/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> <u>2.15</u> %) / DEOK
		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
	Convert the Bayway -	DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	Linden "Z" 138 kV circuit	( <del>12.56</del> <u>13.03</u> %) / EKPC
b2436.83	to 345 kV and any	( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
02 130.03	associated substation	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	upgrades	( <del>0.42</del> <u>0.45</u> %) / OVEC
	apgrades	( <del>0.08</del> <u>0.07</u> %) / PECO
		( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		(3.903.82%) / PPL (5.004.72%) /
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
,		DFAX Allocation:
		PSEG ( <del>96.06</del> <u>96.17</u> %) / RE ( <del>3.94</del> <u>3.83</u> %)
1		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> 1.71%) / AEP
	Convert the Bayway – Linden "W" 138 kV circuit to 345 kV and any associated substation upgrades	(14.1814.04%) / APS
		( <del>6.05</del> 5.61%) / ATSI ( <del>7.92</del> 8.10%)
		/ BGE (4.234.36%) / ComEd
		( <del>13.20</del> 13.14%) / Dayton
		( <del>2.05</del> 2.15%) / DEOK
		( <del>3.18</del> 3.23%)/DL( <del>1.68</del> 1.73%)/
		DPL (2.582.65%) / Dominion
		( <del>12.56</del> 13.03%) / EKPC
b2436.84		( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%)
		/ ME ( <del>1.88</del> 1.93%) / NEPTUNE*
		( <del>0.42</del> 0.45%) / OVEC
		( <del>0.08</del> <u>0.07</u> %) / PECO
		( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
		( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		PSEG ( <del>96.06</del> <u>96.17</u> %) / RE

				( <del>3.94</del> <u>3.83</u> %)
_	*Neptune Regional Transmission System, LLC			

Required Tra	ansmission Enhancements	Annual Revenue Requirer	ment Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
	Convert the Bayway –		DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	Linden "M" 138 kV		( <del>12.56</del> <u>13.03</u> %) / EKPC
b2436.85	circuit to 345 kV and any		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)
02430.83	associated substation		/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*
	upgrades		( <del>0.42</del> <u>0.45</u> %) / OVEC
	upgrades		( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			PSEG ( <del>96.06</del> <u>96.17</u> %) / RE
			( <del>3.94</del> <u>3.83</u> %)
			<b>Load-Ratio Share Allocation:</b>
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
	Relocate Farragut - Hudson "B" and "C" 345 kV circuits to Marion 345 kV and any associated substation upgrades		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE (4.23 <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
			(3.183.23%) / DL (1.681.73%) /
			DPL (2.582.65%) / Dominion
			( <del>12.56</del> <u>13.03</u> %) / EKPC
b2436.90			( <del>1.941.77</del> %) / JCPL ( <del>3.823.84</del> %)
			/ ME ( <del>1.881.93</del> %) / NEPTUNE*
			( <del>0.42<u>0.45</u>%</del> ) / OVEC
			( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			(1.901.89%) / PEPCO
			(3.903.82%) / PPL (5.004.72%) /
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> 0.26%)
1			` '
			DFAX Allocation:
			PSEG (100%)

b2436.91	Relocate the Hudson 2 generation to inject into the 345 kV at Marion and any associated upgrades		PSEG (100%)
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<sup>\*</sup>Neptune Regional Transmission System, LLC

required 110	ansimission Emiancements Am	iuai Kevenue Kequitement	Responsible Customer(s)
b2437.10	New Bergen 345/230 kV transformer and any associated substation upgrades		PSEG (100%)
b2437.11	New Bergen 345/138 kV transformer #1 and any associated substation upgrades		PSEG (100%)
b2437.20	New Bayway 345/138 kV transformer #1 and any associated substation upgrades		PSEG (100%)
b2437.21	New Bayway 345/138 kV transformer #2 and any associated substation upgrades		PSEG (100%)
b2437.30	New Linden 345/230 kV transformer and any associated substation upgrades		PSEG ( <del>96.06</del> 96.17%) / RE ( <del>3.94</del> 3.83%)
b2437.33	New Bayonne 345/69 kV transformer and any associated substation upgrades		PSEG (100%)
b2438	Install two reactors at Tosco 230 kV		PSEG (100%)
b2439	Replace the Tosco 138kV breaker 'CB1/2 (CBT)' with 63kA		PSEG (100%)
b2474	Rebuild Athenia 138 kV to 80kA		PSEG (100%)
b2589	Install a 100 MVAR 230 kV shunt reactor at Mercer station		PSEG (100%)
b2590	Install two 75 MVAR 230 kV capacitors at Sewaren station		PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Add a new 500 kV bay at Hope Creek (Expansion of

Hope Creek substation)

b2633.4

Ī	1		Load-Ratio Share Allocation:
1			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18<u>1</u>4.04</del> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> <u>2.15</u> %) / DEOK
			(3.183.23%) / DL (1.681.73%) /
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
		Install an SVC at New	( <del>12.56</del> <u>13.03</u> %) / EKPC
	b2633.3	Freedom 500 kV	( <del>1.941.77</del> %) / JCPL ( <del>3.823.84</del> %)
	0_000.0	substation	/ ME ( <del>1.881.93</del> %) / NEPTUNE*
			( <del>0.42</del> <u>0.45</u> %) / OVEC
			( <del>0.08<u>0.07</u>%</del> ) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) /
			PSEG ( <del>6.15</del> 6.21%) / RE
			(0.250.26%)
J			DFAX Allocation:
			AEC (0.01%) / DPL (99.98%) /
			JCPL (0.01%)
ŀ			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> 14. <del>04</del> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)
			/ BGE (4.23 <u>4.36</u> %) / ComEd

(<del>13.20</del>13.14%) / Dayton (<del>2.05</del>2.15%) / DEOK (<del>3.18</del>3.23%) / DL (<del>1.68</del>1.73%) / DPL (<del>2.58</del>2.65%) / Dominion

(12.5613.03%) / EKPC

(1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE\* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)

	DFAX Allocation:
	AEC (8.01%) / BGE (1.94%) /
	DPL (12.99%) / JCPL (13.85%)
	/ ME (5.88%) / NEPTUNE*
	(3.45%) / PECO (17.62%) / PPL
	(14.85%) / PSEG (20.79%) / RE
	(0.62%)

Required Transmission Emancements Annual Revenue Requirement Responsible Customer(s)			
		AEC (8.01%) / BGE (1.94%) /	
	Add a new 500/230 kV	DPL (12.99%) / JCPL (13.85%)	
b2633.5	autotransformer at Hope	/ ME (5.88%) / NEPTUNE*	
	Creek and a new Hope	(3.45%) / PECO (17.62%) / PPL	
	Creek 230 kV substation	(14.85%) / PSEG (20.79%) / RE	
		(0.62%)	
.]		Load-Ratio Share Allocation:	
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP	
		( <del>14.18</del> <u>14.04</u> %) / APS	
		( <del>6.05</del> <u>5.61</u> %) / ATSI ( <del>7.92</del> <u>8.10</u> %)	
	Implement high speed relaying utilizing OPGW on Salem – Orchard 500 kV, Hope Creek – New Freedom 500 kV, New	/ BGE ( <del>4.23</del> <u>4.36</u> %) / ComEd	
		( <del>13.20</del> <u>13.14</u> %) / Dayton	
		( <del>2.05</del> <u>2.15</u> %) / DEOK	
		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /	
		DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion	
		( <del>12.56</del> <u>13.03</u> %) / EKPC	
b2633.8		( <del>1.94</del> <u>1.77</u> %) / JCPL ( <del>3.82</del> <u>3.84</u> %)	
02033.0	Freedom - Salem 500 kV,	/ ME ( <del>1.88</del> <u>1.93</u> %) / NEPTUNE*	
	Hope Creek – Salem 500 kV, and New Freedom – Orchard 500 kV lines	( <del>0.42</del> <u>0.45</u> %) / OVEC	
		( <del>0.08</del> <u>0.07</u> %) / PECO	
		( <del>5.31</del> <u>5.29</u> %) / PENELEC	
		( <del>1.90</del> <u>1.89</u> %) / PEPCO	
		( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %) /	
		PSEG ( <del>6.15</del> <u>6.21</u> %) / RE	
		( <del>0.25</del> <u>0.26</u> %)	
		DFAX Allocation:	
		AEC (0.01%) / DPL (99.98%) /	
		JCPL (0.01%)	

<sup>\*</sup>Neptune Regional Transmission System, LLC

required 11		dai revenue requiremen	it Responsible Customer(s)
b2633.91	Implement changes to the tap settings for the two Salem units' step up		AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)
	transformers		JCFL (0.01%)
	Implement changes to the		
	tap settings for the Hope		AEC (0.01%) / DPL (99.98%) /
b2633.92	Creek unit's step up		JCPL (0.01%)
	transformers		JCI L (0.0170)
	transformers		Load-Ratio Share Allocation:
ıl			AEC ( <del>1.72</del> 1.71%) / AEP
			(14.1814.04%) / APS
			( <del>6.05</del> 5.61%) / ATSI ( <del>7.92</del> 8.10%)
			/ BGE (4.234.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
			(3.183.23%) / DL (1.681.73%) /
	Install a 350 MVAR reactor at Roseland 500 kV		DPL (2.582.65%) / Dominion
			( <del>12.56</del> 13.03%) / EKPC
b2702			( <del>1.94</del> 1.77%) / JCPL ( <del>3.82</del> 3.84%)
02702			/ ME ( <del>1.88</del> 1.93%) / NEPTUNE*
			(0.420.45%) / OVEC
			( <del>0.08</del> 0.07%) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			(1.90 <u>1.89</u> %) / PEPCO
			(3.903.82%) / PPL (5.004.72%) / PE
			PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
I		-	(0.25 <u>0.26</u> %) <b>DFAX Allocation:</b>
			PSEG (100%)
	T . II 100 MUAD		F3EG (100%)
b2703	Install a 100 MVAR reactor		PSEG (100%)
	at Bergen 230 kV		. ,
b2704	Install a 150 MVAR reactor		PSEG (100%)
02/04	at Essex 230 kV		FSEO (100%)
1.2505	Install a 200 MVAR reactor		PGPG (1995)
b2705	(variable) at Bergen 345 kV		PSEG (100%)
	Install a 200 MVAR reactor		
b2706	(variable) at Bayway		PSEG (100%)
02700	345 kV		1 SEG (10070)
	Install a 100 MVAR reactor		
b2707			PSEG (100%)
	at Bayonne 345 kV		

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 11	ansmission Enhancements Ann	ual Revenue Requirement	Responsible Customer(s)
b2712	Replace the Bergen 138 kV '40P'breaker with 80kA breaker		PSEG (100%)
b2713	Replace the Bergen 138 kV '90P' breaker with 80kA breaker		PSEG (100%)
b2722	Reconductor the 1 mile Bergen – Bergen GT 138 kV circuit (B-1302)		PSEG (100%)
b2755	Build a third 345 kV source into Newark Airport		PSEG (100%)
b2810.1	Install second 230/69 kV transformer at Cedar Grove		PSEG (100%)
b2810.2	Build a new 69 kV circuit from Cedar Grove to Great Notch		PSEG (100%)
b2811	Build 69 kV circuit from Locust Street to Delair		PSEG (100%)
b2812	Construct River Road to Tonnelle Avenue 69kV Circuit		PSEG (100%)
b2825.1	Install 2X50 MVAR shunt reactors at Kearny 230 kV substation		PSEG (100%)
b2825.2	Increase the size of the Hudson 230 kV, 2X50 MVAR shunt reactors to 2X100 MVAR		PSEG (100%)
b2825.3	Install 2X100 MVAR shunt reactors at Bayway 345 kV substation		PSEG (100%)
b2825.4	Install 2X100 MVAR shunt reactors at Linden 345 kV substation		PSEG (100%)
b2835	Convert the R-1318 and Q1317 (Edison – Metuchen) 138 kV circuits to one 230 kV circuit		See sub-IDs for cost allocations

Required 11	ansmission Emancements Annu	aar Revenue Requiremen	Responsible Customer(s)
b2835.1	Conver the R-1318 and Q- 1317 (Edison – Metuchen) 138 kV circuits to one 230 kV circuit (Brunswick –		AEC (12.08%) / PECO (10022.78%) / PSEG (62.65%) / RE (2.49%)
b2835.2	Meadow Road)  Convert the R-1318 and Q- 1317 (Edison - Metuchen) 138 kV circuits to one 230 kV circuit (Meadow Road -		AEC (11.09%) / PECO (10020.90%) / PSEG (65.40%) / RE (2.61%)
' 	Pierson Ave) Convert the R-1318 and Q-		AEC (10.19%) / PECO
b2835.3	1317 (Edison - Metuchen) 138 kV circuits to one 230 kV circuit (Pierson Ave - Metuchen)		(40.1519.21%) / PSEG (57.4967.90%) / RE (2.362.70%)
b2836	Convert the N-1340 and T- 1372/D-1330 (Brunswick – Trenton) 138 kV circuits to 230 kV circuits		See sub-IDs for cost allocations
b2836.1	Convert the N-1340 and T- 1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Brunswick - Hunterglen)		<u>AEC (22.42%) / PSEG</u> ( <del>100</del> 74.61%) / RE (2.97%)
b2836.2	Convert the N-1340 and T- 1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Hunterglen - Trenton)		<u>AEC (19.58%) / NEPTUNE</u> (10080.42%)
b2836.3	Convert the N-1340 and T- 1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Brunswick - Devils Brook)		NEPTUNE-AEC (100%)
b2836.4	Convert the N-1340 and T- 1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Devils Brook - Trenton)		<u>NEPTUNE AEC (100%)</u>

Required 112	ansmission Enhancements Annu	ıal Revenue Requirement	Responsible Customer(s)
	Convert the F-1358/Z1326		
	and K1363/Y-1325		
b2837	(Trenton – Burlington) 138		See sub-IDs for cost allocations
	kV circuits to 230 kV		
	circuits		
	Convert the F-1358/Z-1326		
	and K-1363/Y-1325		
b2837.1	(Trenton - Burlington) 138		NEPTUNE (100%)
02037.1	kV circuits to 230 kV		NEFTONE (100%)
	circuits (Trenton - Yardville		
	K)		
	Convert the F-1358/Z-1326		
	and K-1363/Y-1325		
b2837.2	(Trenton - Burlington) 138		NEDTUNE (100%)
02037.2	kV circuits to 230 kV		NEPTUNE (100%)
	circuits (Yardville - Ward		
	Ave K)		
	Convert the N-1340 and T-		
	1372/D-1330 (Brunswick -		
b2837.3	Trenton) 138 kV circuits to		NEPTUNE (100%)
	230 kV circuits (Brunswick		
	- Devils Brook)		
	Convert the F-1358/Z-1326		
	and K-1363/Y-1325		NEPTUNE ( <del>7.65</del> 8.50%) /
b2837.4	(Trenton - Burlington) 138		PSEG (88.7188.00%) / RECO
02037.4	kV circuits to 230 kV		( <del>3.64</del> 3.50%)
	circuits (Crosswicks -		( <del>3.01</del> <u>3.30</u> %)
	Bustleton Y)		
	Convert the F-1358/Z-1326		
	and K-1363/Y-1325		NEPTUNE ( <del>6.18</del> <u>6.91</u> %) /
b2837.5	(Trenton - Burlington) 138		PSEG (90.1289.53%) / RECO
02031.3	kV circuits to 230 kV		$(\frac{3.703.56}{9})$
	circuits (Bustleton -		( <del>3.70</del> 3.3070)
	Burlington Y)		
	Convert the F-1358/Z-1326		
	and K-1363/Y-1325		
b2837.6	(Trenton - Burlington) 138		NEPTUNE (100%)
	kV circuits to 230 kV		THEI TOTHE (100%)
	circuits (Trenton - Yardville		
	F)		

Required In	ansmission Enhancements Annu	ual Revenue Requirement	Responsible Customer(s)
	Convert the F-1358/Z-1326		
b2837.7	and K-1363/Y-1325		
	(Trenton - Burlington) 138		NEPTUNE (100%)
02037.7	kV circuits to 230 kV		11E1 1011E (100%)
	circuits (Yardville - Ward		
	Ave F)		
	Convert the F-1358/Z-1326		
	and K-1363/Y-1325		
b2837.8	(Trenton - Burlington) 138		NEDTLINE (100%)
02037.0	kV circuits to 230 kV		NEPTUNE (100%)
	circuits (Ward Ave -		
	Crosswicks Z)		
	Convert the F-1358/Z-1326		
	and K-1363/Y-1325		
1 2027 0	(Trenton - Burlington) 138		NEPTUNE (9.14 <u>100</u> %) <del>/ PSEG</del>
b2837.9	kV circuits to 230 kV		<del>(87.28%) / RECO (3.58%)</del>
	circuits (Crosswicks -		
	Williams Z)		
	Convert the F-1358/Z-1326		
	and K-1363/Y-1325		NEPTUNE ( <del>7.508.52</del> %) / PSEG ( <del>88.85</del> <u>87.98</u> %) / RECO
1 2027 10	(Trenton - Burlington) 138		
b2837.10	kV circuits to 230 kV		
	circuits (Williams -		( <del>3.65</del> <u>3.50</u> %)
	Bustleton Z)		
	Convert the F-1358/Z-1326		
	and K-1363/Y-1325		NIEDTINIE (5 00 C 210() /
1 2027 11	(Trenton - Burlington) 138		NEPTUNE (5.896.31%) /
b2837.11	kV circuits to 230 kV		PSEG (90.4090.10%) / RECO
	circuits (Bustleton -		( <del>3.71</del> <u>3.59</u> %)
	Burlington Z)		
	Build new 138/26 kV		
	Newark GIS station in a		
	building (layout #1A)		
b2870	located adjacent to the		PSEG (100%)
	existing Newark Switch and		,
	demolish the existing		
	Newark Switch		
	Third Source for		
b2933	Springfield Rd. and Stanley		See sub-IDs for cost allocations
02733	Terrace Stations		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
L		<u> </u>	

Required 11	ansmission Emancements Annu	iai Revenue Requirement	Responsible Customer(s)
b2933.1	Construct a 230/69 kV station at Springfield		PSEG (100%)
b2933.2	Construct a 230/69 kV station at Stanley Terrace		PSEG (100%)
b2933.31	Construct a 69 kV network between Front Street, Springfield and Stanley Terrace (Front Street - Springfield)		NEPTUNE (100%)
b2933.32	Construct a 69 kV network between Front Street, Springfield and Stanley Terrace (Springfield – Stanley Terrace)		PSEG (100%)
b2934	Build a new 69 kV line between Hasbrouck Heights and Carlstadt		PSEG (100%)
b2935	Third Supply for Runnemede 69 kV and Woodbury 69 kV		PSEG (100%)
b2935.1	Build a new 230/69 kV switching substation at Hilltop utilizing the PSE&G property and the K-2237 230 kV line		PSEG (100%)
b2935.2	Build a new line between Hilltop and Woodbury 69 kV providing the 3rd supply		PSEG (100%)

Required Tra	ansmission Enhancements Annu	aal Revenue Requirement	Responsible Customer(s)
b2935.3	Convert Runnemede's straight bus to a ring bus and construct a 69 kV line from Hilltop to Runnemede 69 kV		PSEG (100%)
b2955	Wreck and rebuild the VFT  - Warinanco - Aldene 230  kV circuit with paired  conductor		JCPL (92.1443.23%) / NEPTUNE* (7.863.54%) / PSEG (51.19%) / RE (2.04%)
b2956	Replace existing cable on Cedar Grove - Jackson Rd. with 5000kcmil XLPE cable		PSEG (100%)
b2982	Construct a 230/69 kV station at Hillsdale Substation and tie to Paramus and Dumont at 69 kV		PSEG (100%)
b2982.1	Install a 69 kV ring bus and one (1) 230/69 kV transformer at Hillsdale		PSEG (100%)
b2982.2	Construct a 69 kV network between Paramus, Dumont, and Hillsdale Substation using existing 69 kV circuits		PSEG (100%)
b2983	Convert Kuller Road to a 69/13 kV station		PSEG (100%)
b2983.1	Install 69 kV ring bus and two (2) 69/13 kV transformers at Kuller Road		PSEG (100%)
b2983.2	Construct a 69 kV network between Kuller Road, Passaic, Paterson, and Harvey (new Clifton area switching station)		PSEG (100%)
b2986	Replace the existing Roseland – Branchburg – Pleasant Valley 230 kV corridor with new structures		See sub-IDs for cost allocations

Required 11	ansmission Enhancements Annu	iai Revenue Requirement	Responsible Customer(s)
b2986.11	Roseland-Branchburg 230 kV corridor rebuild (Roseland - Readington)		PSEG (100%)
b2986.12	Roseland-Branchburg 230kV corridor rebuild (Readington - Branchburg)		JCPL (100%)
b2986.21	Branchburg-Pleasant Valley 230kV corridor rebuild (Branchburg - East Flemington)		PECO (100%)
b2986.22	Branchburg-Pleasant Valley 230kV corridor rebuild (East Flemington - Pleasant Valley)		NEPTUNE (0.77%) / PECO (99.23%)
b2986.23	Branchburg-Pleasant Valley 230kV corridor rebuild (Pleasant Valley - Rocktown)		JCPL (31.39%) / NEPTUNE (5.26%) / PECO (6.68%) / PSEG (54.43%) / RECO (2.23%)
b2986.24	Branchburg-Pleasant Valley 230kV corridor rebuild (the PSEG portion of Rocktown - Buckingham)		JCPL (37.95%) / NEPTUNE (4.70%) / PECO (5.38%) / PSEG (49.92%) / RECO (2.05%)
b3003	Construct a 230/69 kV station at Maywood		PSEG (100%)
b3003.1	Purchase properties at Maywood to accommodate new construction		PSEG (100%)
b3003.2	Extend Maywood 230 kV bus and install one (1) 230 kV breaker		PSEG (100%)
b3003.3	Install one (1) 230/69 kV transformer at Maywood		PSEG (100%)

required Tre	ansimission Emigneements Amin	iai Revenue Requirement	Responsible Customer(s)
b3003.4	Install Maywood 69 kV ring bus		PSEG (100%)
b3003.5	Construct a 69 kV network between Spring Valley Road, Hasbrouck Heights, and Maywood		PSEG (100%)
b3004	Construct a 230/69/13 kV station by tapping the Mercer – Kuser Rd 230 kV circuit		PSEG (100%)
b3004.1	Install a new Clinton 230 kV ring bus with one (1) 230/69 kV transformer Mercer - Kuser Rd 230 kV circuit		PSEG (100%)
b3004.2	Expand existing 69 kV ring bus at Clinton Ave with two (2) additional 69 kV breakers		PSEG (100%)
b3004.3	Install two (2) 69/13 kV transformers at Clinton Ave		PSEG (100%)
b3004.4	Install 18 MVAR capacitor bank at Clinton Ave 69 kV		PSEG (100%)
b3025	Construct two (2) new 69/13 kV stations in the Doremus area and relocate the Doremus load to the new stations		PSEG (100%)

b3025.1	Install a new 69/13 kV station (Vauxhall) with a ring bus configuration		PSEG (100%)
b3025.2	Install a new 69/13 kV station (19th Ave) with a ring bus configuration		PSEG (100%)
b3025.3	Construct a 69 kV network between Stanley Terrace, Springfield Road, McCarter, Federal Square, and the two new stations (Vauxhall & 19th Ave)		PSEG (100%)

#### SCHEDULE 12 – APPENDIX A

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

Required Transmission Enhancements Responsible Customer(s) Annual Revenue Requirement Reconductor 0.33 miles of the Parkersburg - Belpre b2117 line and upgrade APS (100%) Parkersburg terminal equipment Add 44 MVAR Cap at New b2118 APS (100%) Martinsville Six-Wire Lake Lynn b2120 APS (100%) Lardin 138 kV circuits Replace Weirton 138 kV breaker "Wylie Ridge 210" b2142 APS (100%) with 63 kA breaker Replace Weirton 138 kV breaker "Wylie Ridge 216" b2143 APS (100%) with 63 kA breaker Replace relays at Mitchell b2174.8 APS (100%) substation Replace primary relay at b2174.9 APS (100%) Piney Fork substation Perform relay setting changes at Bethel Park b2174.10 APS (100%) substation Armstrong Substation: Relocate 138 kV controls b2213 from the generating station APS (100%) building to new control building Albright Substation: Install a new control building in the switchyard and relocate b2214 controls and SCADA APS (100%) equipment from the generating station building the new control center Rivesville Switching Station: Relocate controls and SCADA equipment b2215 APS (100%) from the generating station building to new control building

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Willow Island: Install a new 138 kV cross bus at Belmont Substation and reconnect and reconfigure b2216 APS (100%) the 138 kV lines to facilitate removal of the equipment at Willow Island switching station 130 MVAR reactor at b2235 APS (100%) Monocacy 230 kV Install a 32.4 MVAR b2260 APS (100%) capacitor at Bartonville Install a 33 MVAR b2261 APS (100%) capacitor at Damascus Replace 1000 Cu substation conductor and 1200 amp b2267 APS (100%) wave trap at Marlowe Reconductor 6.8 miles of 138kV 336 ACSR with 336 b2268 APS (100%) ACSS from Double Toll Gate to Riverton Reconductor from Collins b2299 Ferry - West Run 138 kV APS (100%) with 556 ACSS Reconductor from Lake b2300 APS (100%) Lynn - West Run 138 kV Install 39.6 MVAR b2341 Capacitor at Shaffers Corner APS (100%) 138 kV Substation Construct a new 138 kV switching station (Shuman Hill substation), which is b2342 APS (100%) next the Mobley 138 kV substation and install a 31.7 MVAR capacitor Install a 31.7 MVAR b2343 capacitor at West Union 138 APS (100%) kV substation

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install a 250 MVAR SVC at b2362 APS (100%) Squab Hollow 230 kV Install a 230 kV breaker at b2362.1 Squab Hollow 230 kV APS (100%) substation Convert the Shingletown 230 kV bus into a 6 breaker b2363 APS (100%) ring bus Install a new 230/138 kV transformer at Squab Hollow 230 kV substation. Loop the Forest - Elko 230 b2364 APS (100%) kV line into Squab Hollow. Loop the Brookville - Elko 138 kV line into Squab Hollow Install a 44 MVAR 138 kV b2412 capacitor at the Hempfield APS (100%) 138 kV substation Install breaker and a half 138 kV substation (Waldo Run) with 4 breakers to accommodate service to b2433.1 APS (100%) MarkWest Sherwood Facility including metering which is cut into Glen Falls Lamberton 138 kV line Install a 70 MVAR SVC at b2433.2 the new WaldoRun 138 kV APS (100%) substation Install two 31.7 MVAR capacitors at the new b2433.3 APS (100%) WaldoRun 138 kV substation Replace the Weirton 138 kV b2424 breaker 'WYLIE RID210' APS (100%) with 63 kA breakers Replace the Weirton 138 kV b2425 breaker 'WYLIE RID216' APS (100%) with 63 kA breakers

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace the Oak Grove 138 b2426 kV breaker 'OG1' with 63 APS (100%) kA breakers Replace the Oak Grove 138 kV breaker 'OG2' with 63 b2427 APS (100%) kA breakers Replace the Oak Grove 138 kV breaker 'OG3' with 63 b2428 APS (100%) kA breakers Replace the Oak Grove 138 b2429 kV breaker 'OG4' with 63 APS (100%) kA breakers Replace the Oak Grove 138 b2430 kV breaker 'OG5' with 63 APS (100%) kA breakers Replace the Oak Grove 138 kV breaker 'OG6' with 63 b2431 APS (100%) kA breakers Replace the Ridgeley 138 kV breaker 'RC1' with a 40 b2432 APS (100%) kA rated breaker Replace the Cabot 138kV breaker 'C9-KISKI VLY' b2440 APS (100%) with 63kA Replace the Ringgold 138 kV breaker 'RCM1' with b2472 APS (100%) 40kA breakers Replace the Ringgold 138 b2473 kV breaker '#4 XMFR' with APS (100%) 40kA breakers Construct a new line between Oak Mound 138 b2475 APS (100%) kV substation and Waldo Run 138 kV substation Construct a new 138 kV substation (Shuman Hill b2545.1 substation) connected to the APS (100%) Fairview -Willow Island (84) 138 kV line

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install a ring bus station with five active positions and two 52.8 MVAR b2545.2 APS (100%) capacitors with 0.941 mH reactors Install a +90/-30 MVAR b2545.3 SVC protected by a 138 kV APS (100%) breaker Remove the 31.7 MVAR b2545.4 capacitor bank at Mobley APS (100%) 138 kV Install a 51.8 MVAR (rated) 138 kV capacitor at b2546 APS (100%) Nyswaner 138 kV substation Construct a new 138 kV six b2547.1 breaker ring bus Hillman APS (100%) substation Loop Smith-Imperial 138 kV line into the new b2547.2 APS (100%) Hillman substation Install +125/-75 MVAR b2547.3 APS (100%) SVC at Hillman substation Install two 31.7 MVAR 138 b2547.4 APS (100%) kV capacitors Eliminate clearance de-rate on Wylie Ridge – Smith 138 kV line and upgrade b2548 APS (100%) terminals at Smith 138 kV, new line ratings 294 MVA (Rate A)/350 MVA (Rate B) Relocate All Dam 6 138 kV line and the 138 kV line to b2612.1 APS (100%) AE units 1&2 Install 138 kV, 3000A bustie breaker in the open busb2612.2 APS (100%) tie position next to the Shaffers corner 138 kV line

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install a 6-pole manual switch, foundation, control b2612.3 APS (100%) cable, and all associated facilities Yukon 138 kV Breaker b2666 APS (100%) Replacement Replace Yukon 138 kV breaker "Y-11(CHARL1)" b2666.1 APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-13(BETHEL)" b2666.2 APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-18(CHARL2)" b2666.3 APS (100%) with an 80 kA breaker Replace Yukon 138 kV b2666.4 breaker "Y-19(CHARL2)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-4(4B-2BUS)" b2666.5 APS (100%) with an 80 kA breaker Replace Yukon 138 kV b2666.6 breaker "Y-5(LAYTON)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV b2666.7 breaker "Y-8(HUNTING)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV b2666.8 breaker "Y-9(SPRINGD)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV b2666.9 breaker "Y-10(CHRL-SP)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-12(1-1BUS)" b2666.10 APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-14(4-1BUS)" b2666.11 APS (100%)

with an 80 kA breaker

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Yukon 138 kV b2666.12 breaker "Y-2(1B-BETHE)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-21(SHEPJ)" b2666.13 APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker b2666.14 APS (100%) "Y-22(SHEPHJT)" with an 80 kA breaker Change CT Ratio at Seneca Caverns from 120/1 to 160/1 b2672 APS (100%) and adjust relay settings accordingly AEP (12.91%) / APS (19.04%) / ATSI (1.24%) / ComEd (0.35%) / Carroll Substation: Replace the Germantown 138 kV Dayton (1.45%) / DEOK b2688.3 wave trap, upgrade the bus (2.30%) / DL (1.11%) / conductor and adjust CT Dominion (44.85%) / ratios EKPC (0.78%) / PEPCO (15.85%) / RECO (0.12%)Upgrade terminal equipment b2689.3 APS (100%) at structure 27A Upgrade 138 kV substation equipment at Butler, Shanor Manor and Krendale b2696 substations. New rating of APS (100%) line will be 353 MVA summer normal/422 MVA emergency Remove existing Black Oak b2700 APS (100%) **SPS** AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton Reconfigure the Ringgold b2743.6 230 kV substation to double (0.59%) / DEOK (1.02%) bus double breaker scheme / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)

Required Tr	ansmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2743.6.1	Replace the two Ringgold 230/138 kV transformers	(8. Da (1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	AEP (6.46%) / APS .74%) / BGE (19.74%) / ComEd (2.16%) / ayton (0.59%) / DEOK 1.02%) / DL (0.01%) / Dominion (39.95%) / KPC (0.45%) / PEPCO (20.88%)
b2743.7	Rebuild/Reconductor the Ringgold – Catoctin 138 kV circuit and upgrade terminal equipment on both ends	(8. Da (1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	AEP (6.46%) / APS .74%) / BGE (19.74%) / ComEd (2.16%) / ayton (0.59%) / DEOK 1.02%) / DL (0.01%) / Dominion (39.95%) / KPC (0.45%) / PEPCO (20.88%)
b2747.1	Relocate the FirstEnergy Pratts 138 kV terminal CVTs at Gordonsville substation to allow for the installation of a new motor operated switch being installed by Dominion		APS (100%)
b2763	Replace the breaker risers and wave trap at Bredinville 138 kV substation on the Cabrey Junction 138 kV terminal		APS (100%)
b2764	Upgrade Fairview 138 kV breaker risers and disconnect leads; Replace 500 CU breaker risers and 556 ACSR disconnect leads with 795 ACSR		APS (100%)
b2964.1	Replace terminal equipment at Pruntytown and Glen Falls 138 kV station		APS (100%)
b2964.2	Reconductor approximately 8.3 miles of the McAlpin - White Hall Junction 138 kV circuit		APS (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Reconductor the Charleroi -Allenport 138 kV line with b2965 954 ACSR conductor. APS <u>DL</u> (100%) Replace breaker risers at Charleroi and Allenport Reconductor the Yukon -Smithton – Shepler Hill Jct 138 kV line with 795 ACSS b2966 APS (100%) conductor. Replace Line Disconnect Switch at Yukon Reconductor the Yukon -Smithton - Shepler Hill Jct 138 kV line and replace b2966.1 APS (100%) terminal equipment as necessary to achieve required rating Convert the existing 6 wire Butler - Shanor Manor -Krendale 138 kV line into b2967 two separate 138 kV lines. APS (100%) New lines will be Butler -Keisters and Butler - Shanor Manor - Krendale 138 kV Ringgold – Catoctin b2970 APS (100%) Solution Install two new 230 kV b2970.1 positions at Ringgold for APS (100%) 230/138 kV transformers Install new 230 kV position for Ringgold – Catoctin 230 b2970.2 APS (100%) kV line Install one new 230 kV b2970.3 breaker at Catoctin APS (100%) substation Install new 230/138 kV transformer at Catoctin b2970.4 substation. Convert APS (100%) Ringgold – Catoctin 138 kV line to 230 kV operation

		aa Revenue Requirement	responsible customer(s)
b2970.5	Convert Garfield 138/12.5 kV substation to 230/12.5 kV		APS (100%)
b2996	Construct new Flint Run 500/138		See sub-IDs for cost
	kV substation		allocations
b2996.1	Construct a new 500/138 kV substation as a 4-breaker ring bus with expansion plans for double-breaker-double-bus on the 500 kV bus and breaker-and-a-half on the 138 kV bus to provide EHV source to the Marcellus shale load growth area. Projected load growth of additional 160 MVA to current plan of 280 MVA, for a total load of 440 MVA served from Waldo Run substation. Construct additional 3-breaker string at Waldo Run 138 kV bus. Relocate the Sherwood #2 line terminal to the new string. Construct two single circuit Flint Run - Waldo Run 138 kV lines using 795 ACSR (approximately 3 miles). After terminal relocation on new 3-breaker string at Waldo Run, terminate new Flint Run 138 kV lines onto the two open terminals		APS (100%)
b2996.2	Loop the Belmont – Harrison 500 kV line into and out of the new Flint Run 500 kV substation (less than 1 mile). Replace primary relaying and carrier sets on Belmont and Harrison 500 kV remote end substations		APS (100%)
b2996.3	Upgrade two (2) existing 138 kV breakers (Rider 50 and #1/4 transformer breaker) at Glen Falls with 63 kA 3000A units		APS (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Reconductor 3.1 mile 556 ACSR portion of Cabot to Butler 138 kV with 556 ACSS and upgrade terminal equipment. 3.1 miles of b3005 APS (100%) line will be reconductored for this project. The total length of the line is 7.75 miles Replace four Yukon 500/138 kV transformers with three APS (<del>52.84</del>73.55%) / b3006 transformers with higher rating DL (<del>47.16</del>26.45%) and reconfigure 500 kV bus Reconductor the Blairsville East to Social Hall 138 kV line and upgrade terminal equipment -AP portion. 4.8 miles total. The new conductor will be 636 b3007.1 APS (100%) ACSS replacing the existing 636 ACSR conductor. At Social Hall, meters, relays, bus conductor, a wave trap, circuit breaker and disconnects will be replaced Replace terminal equipment at Keystone and Cabot 500 kV buses. At Keystone, bus tubing b3010 and conductor, a wave trap, and APS (100%) meter will be replaced. At Cabot, a wave trap and bus conductor will be replaced Construct new Route 51 b3011.1 substation and connect 10 138 DL (100%) kV lines to new substation Upgrade terminal equipment at Yukon to increase rating on Yukon to Charleroi #2 138 kV b3011.2 DL (100%) line (New Yukon to Route 51 #4 138 kV line)

rtequired Tru	isitiission Emancements Aintual i	te venue requirement	responsible customer(s)
b3011.3	Upgrade terminal equipment at Yukon to increase rating on Yukon to Route 51 #1 138 kV line		DL (100%)
b3011.4	Upgrade terminal equipment at Yukon to increase rating on Yukon to Route 51 #2 138 kV line		DL (100%)
b3011.5	Upgrade terminal equipment at Yukon to increase rating on Yukon to Route 51 #3 138 kV line		DL (100%)
b3011.6	Upgrade remote end relays for Yukon – Allenport – Iron Bridge 138 kV line		DL (100%)
b3012.1	Construct two new 138 kV ties with the single structure from APS's new substation to Duquesne's new substation. The estimated line length is approximately 4.7 miles. The line is planned to use multiple ACSS conductors per phase		ATSI (38.21%) / DL (61.79%)
b3012.3	Construct a new Elrama – Route 51 138 kV No.3 line: reconductor 4.7 miles of the existing line, and construct 1.5 miles of a new line to the reconductored portion. Install a new line terminal at APS Route 51 substation		DL (100%)

Required 11a	iishiission enhancements Annuari	Revenue Requirement	Responsible Customer(s)
	Reconductor Vasco Tap to Edgewater Tap 138 kV line.		
b3013	4.4 miles. The new conductor		APS (100%)
	will be 336 ACSS replacing the existing 336 ACSR		, ,
	conductor		
	Reconductor Elrama to		
b3015.6	Mitchell 138 kV line – AP		DL (100%)
03013.0	portion. 4.2 miles total. 2x		DE (10070)
	795 ACSS/TW 20/7		
	Upgrade terminal equipment		
b3015.8	at Mitchell for Mitchell –		APS (100%)
	Elrama 138 kV line		
	Upgrade substation		
b3028	disconnect leads at William		APS (100%)
	138 kV substation		
b3051.1	Ronceverte cap bank and		APS (100%)
03031.1	terminal upgrades		711 5 (10070)
	Install a 138 kV capacitor		
b3052	(29.7 MVAR effective) at		APS (100%)
	West Winchester 138 kV		
b3064.3	Upgrade line relaying at Piney		
	Fork and Bethel Park for		
	Piney For – Elrama 138 kV		APS (100%)
	line and Bethel Park – Elrama		
	138 kV		

Required 112	insmission Ennancements Annual	Revenue Requirement	Responsible Customer(s)
	Reconductor the Yukon –		
	Westraver 138 kV line (2.8		
b3068	miles), replace the line drops		APS (100%)
03000	and relays at Yukon 138 kV		1115 (10070)
	and replace switches at		
	Westraver 138 kV bus		
	Reconductor the Westraver –		
	Route 51 138 kV line (5.63		
b3069	miles) and replace line		APS (100%)
	switches at Westraver 138 kV		
	bus		
	Reconductor the Yukon –		
	Route 51 #1 138 kV line (8		
b3070	miles), replace the line drops,		APS (100%)
	relays and line disconnect		
	switch at Yukon 138 kV bus		
	Reconductor the Yukon –		
L2071	Route 51 #2 138 kV line (8		A DC (1000/)
b3071	miles) and replace relays at		APS (100%)
	Yukon 138 kV bus		
	Reconductor the Yukon –		
b3072	Route 51 #3 138 kV line (8		A DC (1000/)
03072	miles) and replace relays at		APS (100%)
	Yukon 138 kV bus		
b3074	Reconductor the 138 kV bus		A DC (1000/)
03074	at Armstrong substation		APS (100%)
	Replace the 500/138 kV		
b3075	transformer breaker and		A DC (1000/)
03073	reconductor 138 kV bus at		APS (100%)
	Cabot substation		
b3076	Reconductor the Edgewater –		
	Loyalhanna 138 kV line (0.67		APS (100%)
	mile)		
1.2070	Replace the Wylie Ridge		ATSI (72.30%) / DL
b3079	500/345 kV transformer #7		(27.70%)
	Reconductor the 138 kV bus		
1-2002	at Butler and reconductor the		A DC (1000/)
b3083	138 kV bus and replace line		APS (100%)
	trap at Karns City		
	· · · · · · · · · · · · · · · · · · ·		

	Relocate 34.5 kV lines from	
b3128	generating station roof R.	APS (100%)
	Paul Smith 138 kV station	

#### **SCHEDULE 12 – APPENDIX A**

(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 11	ansmission Ennancements Anni	iai Revenue Requirement	Responsible Customer(s)
b1570.4	Add a 345 kV breaker at Marysville station and a 0.1 mile 345 kV line extension from Marysville to the new 345/69 kV Dayton transformer		AEP (100%)
b1660.1	Cloverdale: install 6-765 kV breakers, incremental work for 2 additional breakers, reconfigure and relocate miscellaneous facilities, establish 500 kV station and 500 kV tie with 765 kV station		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP     (14.1814.04%) / APS     (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%)     / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion     (12.5613.03%) / EKPC     (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO     (5.315.29%) / PENELEC     (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%)     / PSEG (6.156.21%) / RE     (0.250.26%)  DFAX Allocation: ATSI (25.80%) / Dayton     (7.128.37%) / DEOK (17.0221.94%) / Dominion     (42.8256.40%) / EKPC     (7.2413.29%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

r	Required 11a	HSHIISSIOH EHHANCEIHERUS AIIIU	iai Kevenue Kequirement	Responsible Customer(s)
				Load-Ratio Share Allocation:
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> 14.04%) / APS
				( <del>6.05</del> <u>5.61</u> %) / ATSI
				( <del>7.92</del> <u>8.10</u> %) / BGE ( <u>4.23</u> <u>4.36</u> %)
				/ ComEd ( <del>13.20</del> <u>13.14</u> %) /
				Dayton ( <del>2.05</del> <u>2.15</u> %) / DEOK
				( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
				DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
				( <del>12.56</del> <u>13.03</u> %) / EKPC
				( <del>1.94</del> <u>1.77</u> %) / JCPL
		Reconductor the AEP		( <del>3.82</del> <u>3.84</u> %) / ME ( <del>1.88</del> <u>1.93</u> %) /
		portion of the Cloverdale -		NEPTUNE* ( <del>0.42</del> <u>0.45</u> %) /
	b1797.1	Lexington 500 kV line with		OVEC ( <del>0.08</del> <u>0.07</u> %) / PECO
		2-1780 ACSS		( <del>5.31</del> <u>5.29</u> %) / PENELEC
		2-1700 ACSS		( <del>1.90</del> <u>1.89</u> %) / PEPCO
				( <del>3.90</del> <u>3.82</u> %) / PPL ( <del>5.00</del> <u>4.72</u> %)
				/ PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
				( <del>0.25</del> <u>0.26</u> %)
				DFAX Allocation:
				AEP (0.79%) / APS (53.70%)
				ATSI (3.01%) / Dayton
				( <del>0.77</del> <u>0.15</u> %) / DEOK
				( <del>1.85</del> <u>0.40</u> %) / Dominion
				( <del>5.17</del> <u>1.13</u> %) / EKPC
				( <del>0.79</del> <u>0.23</u> %) / PEPCO
				( <del>88.41</del> <u>43.60</u> %)
	b2055	Upgrade relay at Brues		AEP (100%)
	02033	station		ALI (100%)
		Upgrade terminal		
		equipment at Howard on		
b2122.3	the Howard - Brookside		AEP (100%)	
	138 kV line to achieve			
		ratings of 252/291 (SN/SE)		
		Perform a sag study on the		
	b2122.4	Howard - Brookside 138		AEP (100%)
		kV line		
	1-2220	Install a 300 MVAR		AED (1000()
	b2229	reactor at Dequine 345 kV		AEP (100%)
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\*Neptune Regional Transmission System, LLC

Load-Ratio Share Allocation:   AEC (1-721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2-052.15%) / DEOK (3.183.23%) / DL (1-681.73%) / DPU (2-882.65%) / Dominion (42.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1-881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)	required 11		iai Kevenue Kequirement	Responsible Customer(s)
(14.1814.04%) / APS				
Constant   Constant				
C7-928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (42.5613.03%) / EKPC (4.941.77%) / JCPL (4.941.77%) / PCPL (4.941.79%) / PEPTUNE* (0.420.45%) / OVEC (0.980.07%) / PECO (5.315.29%) / PENELEC (4.901.89%) / PEPCO (3.993.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)    DFAX Allocation: AEP (100%)				` /
AEP (100%)   ComEd (\frac{13.2013.14\%}{13.2013.14\%})   Dayton (\frac{2.052.15}{2.05}\%) / DEOK (\frac{3.183.23\%}{3.183.23\%}) / DL (\frac{1.681.73\%}{1.681.73\%})   DPL (\frac{2.582.65\%}{2.582.65\%}) / Dominion (\frac{12.582.65(3)}{2.5613.03\%}) / EKPC (\frac{1.941.77\%}{1.911.77\%}) / JCPL (\frac{3.823.84\%}{3.823.84\%}) / ME (\frac{1.881.93\%}{1.8823.84\%}) / DEOC (\frac{3.823.84\%}{3.823.84\%}) / PECO (\frac{5.315.29\%}{3.823.84\%}) / PECO (\frac{5.315.29\%}{3.903.82\%}) / PENELEC (\frac{1.901.89\%}{1.904.72\%}) / PSEG (\frac{6.156.21\%}{5.223\%}) / RE (\frac{0.250.26\%}{3.203.82\%})   DFAX Allocation: AEP (100\%)				·
Dayton (2-052_15%) / DEOK (3.183_23%) / DL (1.681_73%) / DPL (2.582_65%) / Dominion MVAR reactor at Amos 765 kV substation on Amos - N. Proctorville - Hanging Rock with 300 MVAR reactor   (1.941_77%) / JCPL (3.823_84%) / ME (1.881_93%) / NEPTUNE* (0.420_45%) / OVEC (0.080_07%) / PECO (5.315_29%) / PENELEC (1.901_89%) / PECO (3.903_82%) / PPL (5.004_72%) / PSEG (6.156_21%) / RE (0.250_26%)				· — / — /
Replace existing 150   MVAR reactor at Amos 765   kV substation on Amos - N.   Proctorville - Hanging Rock with 300 MVAR reactor   PSEG (6.156.21%) / PECO (5.345.29%) / PECO (5.345.2				,
Replace existing 150   MVAR reactor at Amos 765   kV substation on Amos - N.   Proctorville - Hanging Rock with 300 MVAR reactor   Proctorville - Hanging Rock with 300 MVAR reactor   Proctorville - Hanging Rock with 300 MVAR reactor   (3.823.84%) / ME (4.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PECO (5.315.29%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)   DFAX Allocation: AEP (100%)				Dayton ( <del>2.05</del> <u>2.15</u> %) / DEOK
MVAR reactor at Amos 765   kV substation on Amos - N.   Proctorville - Hanging Rock with 300 MVAR reactor   (1.941.77%) / JCPL   (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)				, <u> </u>
b2230				`
Proctorville - Hanging Rock with 300 MVAR reactor   (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)				
with 300 MVAR reactor    NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)    DFAX Allocation: AEP (100%)    Install 765 kV reactor breaker at Dumont - Wilton Center line     Install 765 kV reactor breaker at Marysville 765 kV substation on the Marysville - Maliszewski line     Change transformer tap	b2230			·
OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)   DFAX Allocation: AEP (100%)    Install 765 kV reactor breaker at Dumont 765 kV substation on the Dumont - Wilton Center line   Install 765 kV reactor breaker at Marysville 765 kV substation on the Marysville - Maliszewski line   Change transformer tap				, , , , , , , , , , , , , , , , , , , ,
b2231  Install 765 kV reactor breaker at Dumont 765 kV substation on the Dumont Wilton Center line  Install 765 kV reactor breaker at Marysville 765 kV substation on the Marysville - Maliszewski line  Change transformer tap		with 300 MVAR reactor		• • • • • • • • • • • • • • • • • • • •
(1.901.89%) / PEPCO   (3.903.82%) / PPL (5.004.72%)   / PSEG (6.156.21%) / RE   (0.250.26%)				· · · · · · · · · · · · · · · · · · ·
b2231  Install 765 kV reactor breaker at Dumont - Wilton Center line  Install 765 kV reactor breaker at Marysville 765 kV substation on the Marysville - Maliszewski line  Change transformer tap				· · · · · · · · · · · · · · · · · · ·
b2231 Install 765 kV reactor breaker at Dumont 765 kV substation on the Dumont Wilton Center line Install 765 kV reactor breaker at Marysville 765 kV substation on the Marysville - Maliszewski line Change transformer tap				·
b2231 Install 765 kV reactor breaker at Dumont 765 kV substation on the Dumont - Wilton Center line Install 765 kV reactor breaker at Marysville 765 b2232 kV substation on the Marysville - Maliszewski line Change transformer tap				· — · · · — ·
b2231  Install 765 kV reactor breaker at Dumont 765 kV substation on the Dumont - Wilton Center line  Install 765 kV reactor breaker at Marysville 765 b2232  kV substation on the Marysville - Maliszewski line  Change transformer tap				`
b2231 Install 765 kV reactor breaker at Dumont 765 kV substation on the Dumont - Wilton Center line  Install 765 kV reactor breaker at Marysville 765 b2232 kV substation on the Marysville - Maliszewski line Change transformer tap				
Install 765 kV reactor breaker at Dumont 765 kV substation on the Dumont - Wilton Center line  Install 765 kV reactor breaker at Marysville 765 b2232 kV substation on the Marysville - Maliszewski line Change transformer tap  AEP (100%)  AEP (100%)				DFAX Allocation:
breaker at Dumont 765 kV substation on the Dumont - Wilton Center line  Install 765 kV reactor breaker at Marysville 765 kV substation on the Marysville - Maliszewski line  Change transformer tap  AEP (100%)  AEP (100%)				AEP (100%)
substation on the Dumont - Wilton Center line  Install 765 kV reactor breaker at Marysville 765 b2232 kV substation on the Marysville - Maliszewski line  Change transformer tap				
substation on the Dumont - Wilton Center line  Install 765 kV reactor breaker at Marysville 765 b2232 kV substation on the Marysville - Maliszewski line Change transformer tap	b2231			AFP (100%)
Install 765 kV reactor breaker at Marysville 765 b2232 kV substation on the Marysville - Maliszewski line Change transformer tap  AEP (100%)	02231			7121 (10070)
breaker at Marysville 765 kV substation on the Marysville - Maliszewski line  Change transformer tap  AEP (100%)		Wilton Center line		
b2232 kV substation on the Marysville - Maliszewski line Change transformer tap  AEP (100%)		Install 765 kV reactor		
Marysville - Maliszewski line Change transformer tap				
line Change transformer tap	b2232			AEP (100%)
Change transformer tap		Marysville - Maliszewski		
		-		
10000 L C .1 D 1				
	b2233	settings for the Baker		AEP (100%)
765/345 kV transformer		765/345 kV transformer		
Loop the North Muskingum	h2252	1		
- Crooksville 138 kV line				
b2252 into AEP's Philo 138 kV AEP (100%)		into AEP's Philo 138 kV		AFD (100%)
station which lies	02232			ALI (100%)
approximately 0.4 miles		1 1		
from the line		from the line		

\*Neptune Regional Transmission System, LLC

required 11	ansimission Emiancements Annu	iai Kevenue Kequirement	Responsible Customer(s)
b2253	Install an 86.4 MVAR capacitor bank at Gorsuch		AEP (100%)
	138 kV station in Ohio		
1.0054	Rebuild approximately 4.9		A F.D. (1000()
b2254	miles of Corner - Degussa		AEP (100%)
	138 kV line in Ohio		
1.0055	Rebuild approximately 2.8		A F.D. (1000()
b2255	miles of Maliszewski -		AEP (100%)
	Polaris 138 kV line in Ohio		
	Upgrade approximately 36		
h2256	miles of 138 kV through		AED (1000/)
b2256	path facilities between		AEP (100%)
	Harrison 138 kV station and Ross 138 kV station in Ohio		
	Rebuild the Pokagon -		
	Corey 69 kV line as a		
	double circuit 138 kV line		
b2257	with one side at 69 kV and		AEP (100%)
02237	the other side as an express		AEI (100%)
	circuit between Pokagon		
	and Corey stations		
	Rebuild 1.41 miles of #2		
	CU 46 kV line between		
	Tams Mountain - Slab Fork		177 (100m)
b2258	to 138 kV standards. The		AEP (100%)
	line will be strung with		
	1033 ACSR		
	Install a new 138/69 kV		
	transformer at George		
b2259	Washington 138/69 kV		AEP (100%)
	substation to provide		AEF (100%)
	support to the 69 kV system		
	in the area		
	Rebuild 4.7 miles of		
	Muskingum River - Wolf		
b2286	Creek 138 kV line and		AEP (100%)
02200	remove the 138/138 kV		1121 (100/0)
	transformer at Wolf Creek		
	Station		

Required 113	ansmission Ennancements Annu	iai Revenue Requirement	Responsible Customer(s)
b2287	Loop in the Meadow Lake - Olive 345 kV circuit into Reynolds 765/345 kV station		AEP (100%)
b2344.1	Establish a new 138/12 kV station, transfer and consolidate load from its Nicholsville and Marcellus 34.5 kV stations at this new station		AEP (100%)
b2344.2	Tap the Hydramatic – Valley 138 kV circuit (~ structure 415), build a new 138 kV line (~3.75 miles) to this new station		AEP (100%)
b2344.3	From this station, construct a new 138 kV line (~1.95 miles) to REA's Marcellus station		AEP (100%)
b2344.4	From REA's Marcellus station construct new 138 kV line (~2.35 miles) to a tap point on Valley – Hydramatic 138 kV ckt (~structure 434)		AEP (100%)
b2344.5	Retire sections of the 138 kV line in between structure 415 and 434 (~ 2.65 miles)		AEP (100%)
b2344.6	Retire AEP's Marcellus 34.5/12 kV and Nicholsville 34.5/12 kV stations and also the Marcellus – Valley 34.5 kV line		AEP (100%)
b2345.1	Construct a new 69 kV line from Hartford to Keeler (~8 miles)		AEP (100%)

raquiru III	ansmission Emiancements Amiu	a revenue requirement	Responsible Customer(s)
b2345.2	Rebuild the 34.5 kV lines between Keeler - Sister Lakes and Glenwood tap		AEP (100%)
b2345.3	switch to 69 kV (~12 miles) Implement in - out at Keeler and Sister Lakes 34.5 kV stations		AEP (100%)
b2345.4	Retire Glenwood tap switch and construct a new Rothadew station. These new lines will continue to operate at 34.5 kV		AEP (100%)
b2346	Perform a sag study for Howard - North Bellville - Millwood 138 kV line including terminal equipment upgrades		AEP (100%)
b2347	Replace the North Delphos 600A switch. Rebuild approximately 18.7 miles of 138 kV line North Delphos - S073. Reconductor the line and replace the existing tower structures		AEP (100%)
b2348	Construct a new 138 kV line from Richlands Station to intersect with the Hales Branch - Grassy Creek 138 kV circuit		AEP (100%)
b2374	Change the existing CT ratios of the existing equipment along Bearskin - Smith Mountain 138kV circuit		AEP (100%)
b2375	Change the existing CT ratios of the existing equipment along East Danville-Banister 138kV circuit		AEP (100%)

required 11	ansmission Emancements Annual Revenue Requirement	Responsible Customer(s)
b2376	Replace the Turner 138 kV breaker 'D'	AEP (100%)
b2377	Replace the North Newark 138 kV breaker 'P'	AEP (100%)
b2378	Replace the Sporn 345 kV breaker 'DD'	AEP (100%)
b2379	Replace the Sporn 345 kV breaker 'DD2'	AEP (100%)
b2380	Replace the Muskingum 345 kV breaker 'SE'	AEP (100%)
b2381	Replace the East Lima 138 kV breaker 'E1'	AEP (100%)
b2382	Replace the Delco 138 kV breaker 'R'	AEP (100%)
b2383	Replace the Sporn 345 kV breaker 'AA2'	AEP (100%)
b2384	Replace the Sporn 345 kV breaker 'CC'	AEP (100%)
b2385	Replace the Sporn 345 kV breaker 'CC2'	AEP (100%)
b2386	Replace the Astor 138 kV breaker '102'	AEP (100%)
b2387	Replace the Muskingum 345 kV breaker 'SH'	AEP (100%)
b2388	Replace the Muskingum 345 kV breaker 'SI'	AEP (100%)
b2389	Replace the Hyatt 138 kV breaker '105N'	AEP (100%)
b2390	Replace the Muskingum 345 kV breaker 'SG'	AEP (100%)
b2391	Replace the Hyatt 138 kV breaker '101C'	AEP (100%)
b2392	Replace the Hyatt 138 kV breaker '104N'	AEP (100%)
b2393	Replace the Hyatt 138 kV breaker '104S'	AEP (100%)

required 11	ansinission Emiancements Anni	iai Kevenue Kequitement	Responsible Customer(s)
b2394	Replace the Sporn 345 kV breaker 'CC1'		AEP (100%)
b2409	Install two 56.4 MVAR capacitor banks at the Melmore 138 kV station in Ohio		AEP (100%)
b2410	Convert Hogan Mullin 34.5 kV line to 138 kV, establish 138 kV line between Jones Creek and Strawton, rebuild existing Mullin Elwood 34.5 kV and terminate line into Strawton station, retire Mullin station		AEP (100%)
b2411	Rebuild the 3/0 ACSR portion of the Hadley - Kroemer Tap 69 kV line utilizing 795 ACSR conductor		AEP (100%)
b2423	Install a 300 MVAR shunt reactor at AEP's Wyoming 765 kV station		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)

	<b>DFAX Allocation:</b>
	AEP (100%)

Required 11	ansmission Enhancements Annu	iai Revenue Requirement	Responsible Customer(s)
b2444	Willow - Eureka 138 kV line: Reconductor 0.26 mile		AEP (100%)
	of 4/0 CU with 336 ACSS		
	Complete a sag study of		
b2445	Tidd - Mahans Lake 138 kV		AEP (100%)
	line		
	Rebuild the 7-mile 345 kV		
b2449	line between Meadow Lake		AEP (100%)
02449	and Reynolds 345 kV		AEI (100%)
	stations		
	Add two 138 kV circuit		
b2462	breakers at Fremont station		AEP (100%)
02402	to fix tower contingency		71L1 (10070)
	'408 <u>2</u> '		
	Construct a new 138/69 kV		
	Yager station by tapping 2-		
b2501	138 kV FE circuits		AEP (100%)
	(Nottingham-Cloverdale,		
	Nottingham-Harmon)		
	Build a new 138 kV line		
b2501.2	from new Yager station to		AEP (100%)
	Azalea station		
	Close the 138 kV loop back		
b2501.3	into Yager 138 kV by		AEP (100%)
02301.3	converting part of local 69		1111 (100/0)
	kV facilities to 138 kV		
b2501.4	Build 2 new 69 kV exits to		
	reinforce 69 kV facilities		
	and upgrade conductor		AEP (100%)
	between Irish Run 69 kV		1221 (100,0)
	Switch and Bowerstown 69		
	kV Switch		

required 11		iai Kevenue Kequitemeni	Responsible Customer(s)
	Construct new 138 kV		
	switching station		
	Nottingham tapping 6-138		
	kV FE circuits (Holloway-		
	Brookside, Holloway-		
b2502.1	Harmon #1 and #2,		AEP (100%)
	Holloway-Reeds,		
	Holloway-New Stacy,		
	Holloway-Cloverdale). Exit		
	a 138 kV circuit from new		
	station to Freebyrd station		
1,0500 O	Convert Freebyrd 69 kV to		AED (1000/)
b2502.2	138 kV		AEP (100%)
	Rebuild/convert Freebyrd-		
b2502.3	South Cadiz 69 kV circuit		AEP (100%)
	to 138 kV		
b2502.4	Upgrade South Cadiz to 138		AED (100%)
02302.4	kV breaker and a half		AEP (100%)
	Replace the Sporn 138 kV		
b2530	breaker 'G1' with 80kA		AEP (100%)
	breaker		
	Replace the Sporn 138 kV		
b2531	breaker 'D' with 80kA		AEP (100%)
	breaker		
	Replace the Sporn 138 kV		
b2532	breaker 'O1' with 80kA		AEP (100%)
	breaker		·
	Replace the Sporn 138 kV		
b2533	breaker 'P2' with 80kA		AEP (100%)
	breaker		·
	Replace the Sporn 138 kV		
b2534	breaker 'U' with 80kA		AEP (100%)
	breaker		
	Replace the Sporn 138 kV		
b2535	breaker 'O' with 80 kA		AEP (100%)
	breaker		•
		'	

Required 11	ansmission Enhancements Anni	uai Revenue Requirement	Responsible Customer(s)
b2536	Replace the Sporn 138 kV breaker 'O2' with 80 kA		AED (1000/)
02330	breaker O2 with 80 kA		AEP (100%)
	Replace the Robinson Park		
	138 kV breakers A1, A2,		
b2537	B1, B2, C1, C2, D1, D2,		AEP (100%)
	E1, E2, and F1 with 63 kA		
	breakers		
	Reconductor 0.5 miles		
	Tiltonsville – Windsor 138		
b2555	kV and string the vacant side of the 4.5 mile section		AEP (100%)
	using 556 ACSR in a six		
	wire configuration		
	Install two 138 kV prop		
	structures to increase the		
b2556	maximum operating		AED (1000/)
02330	temperature of the Clinch		AEP (100%)
	River- Clinch Field 138 kV		
	line		
	Temporary operating		
	procedure for delay of		
	upgrade b1464. Open the Corner 138 kV circuit		
	breaker 86 for an overload		
	of the Corner – Washington		
b2581	MP 138 kV line. The tower		AEP (100%)
	contingency loss of		
	Belmont – Trissler 138 kV		
	and Belmont – Edgelawn		
	138 kV should be added to		
	Operational contingency		

1	Construct a pays 60 la V line		
	Construct a new 69 kV line		
b2591	approximately 2.5 miles		
	from Colfax to Drewry's.		AED (1000()
	Construct a new Drewry's		AEP (100%)
	station and install a new		
	circuit breaker at Colfax		
	station.		
	Rebuild existing East		
	Coshocton – North		
	Coshocton double circuit		
b2592	line which contains		AEP (100%)
02392	Newcomerstown – N.		AEF (100%)
	Coshocton 34.5 kV Circuit		
	and Coshocton – North		
	Coshocton 69 kV circuit		
	Rebuild existing West		
	Bellaire – Glencoe 69 kV		
1.2502	line with 138 kV & 69 kV		A FID (1000())
b2593	circuits and install 138/69		AEP (100%)
	kV transformer at Glencoe		
	Switch		
	Rebuild 1.0 mile of		
1.2.504	Brantley – Bridge Street 69		177 (100m)
b2594	kV Line with 1033 ACSR		AEP (100%)
	overhead conductor		
	Rebuild 7.82 mile Elkhorn		
	City – Haysi S.S 69 kV line		
b2595.1	utilizing 1033 ACSR built		AEP (100%)
	to 138 kV standards		
	Rebuild 5.18 mile Moss –		
	Haysi SS 69 kV line		
b2595.2	utilizing 1033 ACSR built		AEP (100%)
	$\mathcal{C}$		
	to 138 kV standards		
	Move load from the 34.5		
1.0506	kV bus to the 138 kV bus		AED (1000()
b2596	by installing a new 138/12		AEP (100%)
	kV XF at New Carlisle		
	station in Indiana		

Required Tr	ansmission Enhancements Annu	al Revenue Requirement	Responsible Customer(s)
	Rebuild approximately 1		
	mi. section of Dragoon-		
	Virgil Street 34.5 kV line		
	between Dragoon and		
b2597	Dodge Tap switch and		AEP (100%)
	replace Dodge switch		
	MOAB to increase thermal		
	capability of Dragoon-		
	Dodge Tap branch		
	Rebuild approximately 1		
	mile section of the Kline-		
	Virgil Street 34.5 kV line		
b2598	between Kline and Virgil		AEP (100%)
02398	Street tap. Replace MOAB		ALI (100%)
	switches at Beiger, risers at		
	Kline, switches and bus at		
	Virgil Street.		
	Rebuild approximately 0.1		
b2599	miles of 69 kV line between		AEP (100%)
	Albion and Albion tap		
b2600	Rebuild Fremont – Pound		AED (1000/)
02000	line as 138 kV		AEP (100%)
b2601	Fremont Station		AED (1000/)
02001	Improvements		AEP (100%)
	Replace MOAB towards		
b2601.1	Beaver Creek with 138 kV		AEP (100%)
	breaker		
	Replace MOAB towards		
b2601.2	Clinch River with 138 kV		AEP (100%)
	breaker		
b2601.3	Replace 138 kV Breaker A		AED (1000/ )
02001.3	with new bus-tie breaker		AEP (100%)
	Re-use Breaker A as high		
b2601.4	side protection on		AEP (100%)
	transformer #1		
	Install two (2) circuit		
h2601 5	switchers on high side of		AED (1000/)
b2601.5	transformers # 2 and 3 at		AEP (100%)
	Fremont Station		
	·		·

11		 responsible customer(s)
b2602.1	Install 138 kV breaker E2 at North Proctorville	AEP (100%)
	Construct 2.5 Miles of 138	
b2602.2	kV 1033 ACSR from East	AEP (100%)
	Huntington to Darrah 138	,
	kV substations	
	Install breaker on new line	
b2602.3	exit at Darrah towards East	AEP (100%)
	Huntington	
	Install 138 kV breaker on	
b2602.4	new line at East Huntington	AEP (100%)
	towards Darrah	
	Install 138 kV breaker at	
b2602.5	East Huntington towards	AEP (100%)
	North Proctorville	
b2603	Boone Area Improvements	AEP (100%)
	Purchase approximately a	
	200X300 station site near	
b2603.1	Slaughter Creek 46 kV	AEP (100%)
	station (Wilbur Station)	
	Install 3 138 kV circuit	
b2603.2	breakers, Cabin Creek to	AEP (100%)
02003.2	Hernshaw 138 kV circuit	ALI (10070)
	Construct 1 mi. of double	
	circuit 138 kV line on	
	Wilbur – Boone 46 kV line	
	with 1590 ACSS 54/19	
b2603.3	conductor @ 482 Degree	AEP (100%)
	design temp. and 1-159 12/7	
	ACSR and one 86 Sq.MM.	
	0.646" OPGW Static wires	
	Bellefonte Transformer	
b2604	Addition	AEP (100%)
	7 Iddition	

ansmission Ennancements Annu	iai Revenue Requirement	Responsible Customer(s)
Rebuild and reconductor		
Kammer – George		
Washington 69 kV circuit		
and George Washington –		
Moundsville ckt #1,		AEP (100%)
designed for 138kV.		
Upgrade limiting equipment		
at remote ends and at tap		
stations		
Convert Bane –		
Hammondsville from 23 kV		AEP (100%)
to 69 kV operation		
Pine Gap Relay Limit		AED (1000/)
Increase		AEP (100%)
Dichlands Dalay Ungrada		AEP (100%)
Richards Relay Opgrade		ALI (100%)
Thorofare – Goff Run –		
Powell Mountain 138 kV		AEP (100%)
Build		
Rebuild Pax Branch –		AEP (100%)
		71L1 (10070)
Skin Fork Area		AEP (100%)
Improvements		71L1 (10070)
Skin Fork and other		AEP (100%)
components		
		AEP (100%)
Sundial-Baileysville 138 kV		
line		
a slip over CT with higher		
thermal rating in order to		AEP (100%)
remove 1193 MVA limit on		
Tanners Creek 345 kV line)		
	Rebuild and reconductor Kammer – George Washington 69 kV circuit and George Washington – Moundsville ckt #1, designed for 138kV. Upgrade limiting equipment at remote ends and at tap stations Convert Bane – Hammondsville from 23 kV to 69 kV operation Pine Gap Relay Limit Increase Richlands Relay Upgrade Thorofare – Goff Run – Powell Mountain 138 kV Build Rebuild Pax Branch – Scaraboro as 138 kV Skin Fork Area Improvements New 138/46 kV station near Skin Fork and other components Construct 3.2 miles of 1033 ACSR double circuit from new Station to cut into Sundial-Baileysville 138 kV line Replace metering BCT on Tanners Creek CB T2 with a slip over CT with higher thermal rating in order to remove 1193 MVA limit on facility (Miami Fort-	Rebuild and reconductor Kammer – George Washington 69 kV circuit and George Washington – Moundsville ckt #1, designed for 138kV. Upgrade limiting equipment at remote ends and at tap stations Convert Bane – Hammondsville from 23 kV to 69 kV operation Pine Gap Relay Limit Increase Richlands Relay Upgrade  Thorofare – Goff Run – Powell Mountain 138 kV Build Rebuild Pax Branch – Scaraboro as 138 kV Skin Fork Area Improvements New 138/46 kV station near Skin Fork and other components Construct 3.2 miles of 1033 ACSR double circuit from new Station to cut into Sundial-Baileysville 138 kV line Replace metering BCT on Tanners Creek CB T2 with a slip over CT with higher thermal rating in order to remove 1193 MVA limit on facility (Miami Fort-

required 11	ansinission Emiancements Anni	iai Kevenue Requirement	Responsible Customer(s)
b2643	Replace the Darrah 138 kV breaker 'L' with 40kA rated breaker		AEP (100%)
b2645	Ohio Central 138 kV Loop		AEP (100%)
b2667	Replace the Muskingum 138 kV bus # 1 and 2		AEP (100%)
b2668	Reconductor Dequine to Meadow Lake 345 kV circuit #1 utilizing dual 954 ACSR 54/7 cardinal conductor		AEP (100%)
b2669	Install a second 345/138 kV transformer at Desoto		AEP (100%)
b2670	Replace switch at Elk Garden 138 kV substation (on the Elk Garden – Lebanon 138 kV circuit)		AEP (100%)
b2671	Replace/upgrade/add terminal equipment at Bradley, Mullensville, Pinnacle Creek, Itmann, and Tams Mountain 138 kV substations. Sag study on Mullens – Wyoming and Mullens – Tams Mt. 138 kV circuits		AEP (100%)

Required 11	ansimission Emiancements Aimi	iai Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI
			( <del>7.92</del> <u>8.10</u> %) / BGE ( <u>4.234.36</u> %)
			/ ComEd ( <del>13.20</del> <u>13.14</u> %) /
			Dayton ( <del>2.05</del> <u>2.15</u> %) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
			DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	Install a +/- 450 MVAR		( <del>12.56</del> <u>13.03</u> %) / EKPC
b2687.1	SVC at Jacksons Ferry 765		( <del>1.94</del> <u>1.77</u> %) / JCPL
	kV substation		( <del>3.82</del> <u>3.84</u> %) / ME ( <del>1.88</del> <u>1.93</u> %) /
			NEPTUNE* ( <del>0.42</del> <u>0.45</u> %) /
			OVEC ( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%)
			/ PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

1		dai revende requirement	responsible editioner(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> <u>5.61</u> %) / ATSI
			( <del>7.92</del> 8.10%) / BGE ( <del>4.23</del> 4.36%)
			/ ComEd ( <del>13.20</del> <u>13.14</u> %) /
			Dayton (2.052.15%) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %) /
	Install a 300 MVAR shunt		DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	line reactor on the		( <del>12.56</del> <u>13.03</u> %) / EKPC
b2687.2	Broadford end of the		( <del>1.94</del> <u>1.77</u> %) / JCPL
	Broadford – Jacksons Ferry		( <del>3.82</del> <u>3.84</u> %) / ME ( <del>1.88</del> <u>1.93</u> %) /
	765 kV line		NEPTUNE* ( <del>0.42</del> <u>0.45</u> %) /
			OVEC ( <del>0.08</del> <u>0.07</u> %) / PECO
			( <del>5.31</del> <u>5.29</u> %) / PENELEC
			( <del>1.90</del> <u>1.89</u> %) / PEPCO
			( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%)
			/ PSEG ( <del>6.15</del> <u>6.21</u> %) / RE
			( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			AEP (100%)
	Mitigate violations		
	identified by sag study to		
	operate Fieldale-Thornton-		
b2697.1	Franklin 138 kV overhead		AEP (100%)
02057.11	line conductor at its max.		1121 (10070)
	operating temperature. 6		
	potential line crossings to		
	be addressed.		
	Replace terminal equipment		
	at AEP's Danville and East		
b2697.2	Danville substations to		AEP (100%)
0207,12	improve thermal capacity of		(100,0)
	Danville – East Danville		
	138 kV circuit		

<sup>\*</sup>Neptune Regional Transmission System, LLC

required Tre	ansimission Emianeements Amitu	ar revenue requirement	Responsible Cusiomer(s)
b2698	Replace relays at AEP's Cloverdale and Jackson's Ferry substations to improve the thermal capacity of Cloverdale – Jackson's Ferry 765 kV line		AEP (100%)
b2701.1	Construct Herlan station as breaker and a half configuration with 9-138 kV CB's on 4 strings and with 2- 28.8 MVAR capacitor banks		AEP (100%)
b2701.2	Construct new 138 kV line from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW		AEP (100%)
2701.3	Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit		AEP (100%)
b2714	Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV		AEP (100%)
b2715	Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station		AEP (100%)
b2727	Replace the South Canton 138 kV breakers 'K', 'J', 'J1', and 'J2' with 80kA breakers		AEP (100%)

		<u> </u>	1
b2731	Convert the Sunnyside – East Sparta – Malvern 23 kV sub-transmission network to 69 kV. The lines are already built to 69 kV standards		AEP (100%)
b2733	Replace South Canton 138 kV breakers 'L' and 'L2' with 80 kA rated breakers		AEP (100%)
b2750.1	Retire Betsy Layne 138/69/43 kV station and replace it with the greenfield Stanville station about a half mile north of the existing Betsy Layne station		AEP (100%)
b2750.2	Relocate the Betsy Layne capacitor bank to the Stanville 69 kV bus and increase the size to 14.4 MVAR		AEP (100%)
b2753.1	Replace existing George Washington station 138 kV yard with GIS 138 kV breaker and a half yard in existing station footprint. Install 138 kV revenue metering for new IPP connection		AEP (100%)
b2753.2	Replace Dilles Bottom 69/4 kV Distribution station as breaker and a half 138 kV yard design including AEP Distribution facilities but initial configuration will constitute a 3 breaker ring bus		AEP (100%)

Connect two 138 kV 6-wired circuits from "Point A" (currently de-energized and owned by FirstEnergy) in circuit positions previously	
owned by FirstEnergy) in	
owned by FirstEnergy) in	
1 10752 2   Circuit positions previously   AED (1000/)	
b2753.3 designated Burger #1 & AEP (100%)	
Burger #2 138 kV. Install	
interconnection settlement	
metering on both circuits	
exiting Holloway	
Build double circuit 138 kV	
line from Dilles Bottom to	
"Point A". Tie each new	
AEP circuit in with a 6-wired	
b2753.6 line at Point A. This will AEP (100%)	
create a Dilles Bottom –	
Holloway 138 kV circuit and	
a George Washington –	
Holloway 138 kV circuit	
Retire line sections (Dilles	
Bottom – Bellaire and	
Moundsville – Dilles Bottom	
69 kV lines) south of	
b2753.7 FirstEnergy 138 kV line acmiden mean "Point A" Tie	
corridor, near "Point A". Tie George Washington –	
Moundsville 69 kV circuit to	
George Washington – West	
Bellaire 69 kV circuit	
Rebuild existing 69 kV line	
as double circuit from	
George Washington – Dilles	
Bottom 138 kV. One circuit	
b2753.8   Will cut into Dilles Bottom   AEP (100%)	
138 kV initially and the other	
will go past with future plans	
to cut in	

Required Tra	ansmission Enhancements Annual	l Revenue Requirement	Responsible Customer(s)
	Perform a Sag Study of the		
b2760	Saltville – Tazewell 138 kV		AEP (100%)
02700	line to increase the thermal		AEF (100%)
	rating of the line		
b2761.1	Replace the Hazard 161/138		AEP (100%)
02/01.1	kV transformer		AEP (100%)
	Perform a Sag Study of the		
b2761.2	Hazard – Wooten 161 kV line		AED (1000/)
02/01.2	to increase the thermal rating		AEP (100%)
	of the line		
	Rebuild the Hazard – Wooton		
b2761.3	161 kV line utilizing 795 26/7		AEP (100%)
02/01.3	ACSR conductor (300 MVA		ALF (100%)
	rating)		
	Perform a Sag Study of Nagel		
b2762	<ul> <li>West Kingsport 138 kV line</li> </ul>		AEP (100%)
02702	to increase the thermal rating		ALI (100%)
	of the line		
	Reconductor the entire		
b2776	Dequine – Meadow Lake 345		AEP (100%)
	kV circuit #2		
	Reconductor the entire		
b2777	Dequine – Eugene 345 kV		AEP <u>EKPC</u> (100%)
	circuit #1		
	Construct a new 138 kV		
b2779.1	station, Campbell Road,		AEP (100%)
02,75.1	tapping into the Grabill –		1121 (10070)
	South Hicksville138 kV line		
	Reconstruct sections of the		
	Butler-N.Hicksville and		
b2779.2	Auburn-Butler 69 kV circuits		AEP (100%)
02777.2	as 138 kV double circuit and		
	extend 138 kV from		
	Campbell Road station		

required 11	ansmission Enhancements Annual	Revenue Requirement	Responsible Customer(s)
b2779.3	Construct a new 345/138 kV SDI Wilmington Station which will be sourced from Collingwood 345 kV and serve the SDI load at 345 kV and 138 kV, respectively		AEP (100%)
b2779.4	Loop 138 kV circuits in-out of the new SDI Wilmington 138 kV station resulting in a direct circuit to Auburn 138 kV and an indirect circuit to Auburn and Rob Park via Dunton Lake, and a circuit to Campbell Road; Reconductor 138 kV line section between Dunton Lake – SDI Wilmington		AEP (100%)
b2779.5	Expand Auburn 138 kV bus		AEP (100%)
b2787	Reconductor 0.53 miles (14 spans) of the Kaiser Jct Air Force Jct. Sw section of the Kaiser - Heath 69 kV circuit/line with 336 ACSR to match the rest of the circuit (73 MVA rating, 78% loading)		AEP (100%)
b2788	Install a new 3-way 69 kV line switch to provide service to AEP's Barnesville distribution station. Remove a portion of the #1 copper T- Line from the 69 kV through- path		AEP (100%)

required 11	ansinission Emiancements	Aimuai Revenue Requirei	Hent Responsible Customer(s)
b2789	Rebuild the Brues - Glendale Heights 69 kV line section (5 miles) with 795 ACSR (128		AEP (100%)
	MVA rating, 43% loading)		
	Install a 3 MVAR, 34.5 kV		
b2790	cap bank at Caldwell		AEP (100%)
	substation		,
1.0701	Rebuild Tiffin – Howard, new		A F.D. (1000()
b2791	transformer at Chatfield		AEP (100%)
	Rebuild portions of the East		
	Tiffin - Howard 69 kV line		
	from East Tiffin to West		
b2791.1	Rockaway Switch (0.8 miles)		AEP (100%)
	using 795 ACSR Drake		
	conductor (129 MVA rating,		
	50% loading)		
	Rebuild Tiffin - Howard 69		
	kV line from St. Stephen's		
	Switch to Hinesville (14.7		
b2791.2	miles) using 795 ACSR		AEP (100%)
	Drake conductor (90 MVA		
	rating, non-conductor limited,		
	38% loading)		
	New 138/69 kV transformer		
b2791.3	with 138/69 kV protection at		AEP (100%)
	Chatfield		
b2791.4	New 138/69 kV protection at		AEP (100%)
02//1.4	existing Chatfield transformer		ALI (100/0)
	Replace the Elliott		
	transformer with a 130 MVA		
b2792	unit, reconductor 0.42 miles		
	of the Elliott – Ohio		
	University 69 kV line with		AEP (100%)
	556 ACSR to match the rest		71L1 (100/0)
	of the line conductor (102		
	MVA rating, 73% loading)		
	and rebuild 4 miles of the		
	Clark Street – Strouds R		

1104011100111		and the contract of the contra	rement responsible editioner(s)
b2793	Energize the spare Fremont Center 138/69 kV 130 MVA transformer #3. Reduces overloaded facilities to 46% loading		AEP (100%)
b2794	Construct new 138/69/34 kV station and 1-34 kV circuit (designed for 69 kV) from new station to Decliff station, approximately 4 miles, with 556 ACSR conductor (51 MVA rating)		AEP (100%)
b2795	Install a 34.5 kV 4.8 MVAR capacitor bank at Killbuck 34.5 kV station		AEP (100%)
b2796	Rebuild the Malvern - Oneida Switch 69 kV line section with 795 ACSR (1.8 miles, 125 MVA rating, 55% loading)		AEP (100%)
b2797	Rebuild the Ohio Central - Conesville 69 kV line section (11.8 miles) with 795 ACSR conductor (128 MVA rating, 57% loading). Replace the 50 MVA Ohio Central 138/69 kV XFMR with a 90 MVA unit		AEP (100%)
b2798	Install a 14.4 MVAR capacitor bank at West Hicksville station. Replace ground switch/MOAB at West Hicksville with a circuit switcher		AEP (100%)
b2799	Rebuild Valley - Almena, Almena - Hartford, Riverside - South Haven 69 kV lines. New line exit at Valley Station. New transformers at Almena and Hartford		AEP (100%)

		1	· · · · · · · · · · · · · · · · · · ·
	Rebuild 12 miles of Valley –		
	Almena 69 kV line as a		
	double circuit 138/69 kV line		
b2799.1	using 795 ACSR conductor		AEP (100%)
	(360 MVA rating) to		,
	introduce a new 138 kV		
	source into the 69 kV load		
	pocket around Almena station		
	Rebuild 3.2 miles of Almena		
b2799.2	to Hartford 69 kV line using		AEP (100%)
	795 ACSR conductor (90		
	MVA rating)		
	Rebuild 3.8 miles of		
b2799.3	Riverside – South Haven 69		AEP (100%)
	kV line using 795 ACSR		
	conductor (90 MVA rating)		
	At Valley station, add new		
	138 kV line exit with a 3000		
b2799.4	A 40 kA breaker for the new		AEP (100%)
	138 kV line to Almena and		
	replace CB D with a 3000 A		
	40 kA breaker		
	At Almena station, install a		
	90 MVA 138/69 kV		
b2799.5	transformer with low side		AEP (100%)
	3000 A 40 kA breaker and		,
	establish a new 138 kV line		
	exit towards Valley		
	At Hartford station, install a		
b2700 6	second 90 MVA 138/69 kV		AED (1000/ \
b2799.6	transformer with a circuit		AEP (100%)
	switcher and 3000 A 40 kA		
	low side breaker		

required Transfillssion Extractive transfills		T IIII I OO T T TO T O T TO T OO T TO T OO T O	ement responsible editioner(s)
b2817	Replace Delaware 138 kV breaker 'P' with a 40 kA breaker		AEP (100%)
b2818	Replace West Huntington 138 kV breaker 'F' with a 40 kA breaker		AEP (100%)
b2819	Replace Madison 138 kV breaker 'V' with a 63 kA breaker		AEP (100%)
b2820	Replace Sterling 138 kV breaker 'G' with a 40 kA breaker		AEP (100%)
b2821	Replace Morse 138 kV breakers '103', '104', '105', and '106' with 63 kA breakers		AEP (100%)
b2822	Replace Clinton 138 kV breakers '105' and '107' with 63 kA breakers		AEP (100%)
b2826.1	Install 300 MVAR reactor at Ohio Central 345 kV substation		AEP (100%)

Required 11	ansmission Ennancements Annual	Revenue Requirement	Responsible Customer(s)
b2826.2	Install 300 MVAR reactor at West Bellaire 345 kV substation		AEP (100%)
b2831.1	Upgrade the Tanner Creek – Miami Fort 345 kV circuit (AEP portion)		<b>DFAX Allocation:</b> Dayton (34.34 <u>61.71</u> %) / DEOK (56.45 <u>37.68</u> %) / EKPC (9.21%)OVEC (0.61%)
b2832	Six wire the Kyger Creek – Sporn 345 kV circuits #1 and #2 and convert them to one circuit		AEP (100%)
b2833	Reconductor the Maddox Creek – East Lima 345 kV circuit with 2-954 ACSS Cardinal conductor		<b>DFAX Allocation:</b> <u>AEP (80.83%) / Dayton</u> (10018.73%) / OVEC (0.44%)
b2834	Reconductor and string open position and sixwire 6.2 miles of the Chemical – Capitol Hill 138 kV circuit		AEP (100%)
b2872	Replace the South Canton 138 kV breaker 'K2' with a 80 kA breaker		AEP (100%)
b2873	Replace the South Canton 138 kV breaker "M" with a 80 kA breaker		AEP (100%)
b2874	Replace the South Canton 138 kV breaker "M2" with a 80 kA breaker		AEP (100%)
b2878	Upgrade the Clifty Creek 345 kV risers		AEP (100%)
b2880	Rebuild approximately 4.77 miles of the Cannonsburg – South Neal 69 kV line section utilizing 795 ACSR conductor (90 MVA rating)		AEP (100%)

	distinssion Emidicentions	 rement responsible editionier(s)
b2881	Rebuild ~1.7 miles of the Dunn Hollow – London 46 kV line section utilizing 795 26/7 ACSR conductor (58 MVA rating, non-conductor limited)	AEP (100%)
b2882	Rebuild Reusens - Peakland Switch 69 kV line. Replace Peakland Switch	AEP (100%)
b2882.1	Rebuild the Reusens - Peakland Switch 69 kV line (approximately 0.8 miles) utilizing 795 ACSR conductor (86 MVA rating, non-conductor limited)	AEP (100%)
b2882.2	Replace existing Peakland S.S with new 3 way switch phase over phase structure	AEP (100%)
b2883	Rebuild the Craneco – Pardee – Three Forks – Skin Fork 46 kV line section (approximately 7.2 miles) utilizing 795 26/7 ACSR conductor (108 MVA rating)	AEP (100%)
b2884	Install a second transformer at Nagel station, comprised of 3 single phase 250 MVA 500/138 kV transformers.  Presently, TVA operates their end of the Boone Dam – Holston 138 kV interconnection as normally open preemptively for the loss of the existing Nagel	AEP (100%)
b2885	New delivery point for City of Jackson	AEP (100%)

required 11	arismission Emianeements	7 Miliaal Revenue Require	ment Responsible Customer(s)
	Install a new Ironman Switch		
1-2005 1	to serve a new delivery point		AED (1000/)
b2885.1	requested by the City of		AEP (100%)
	Jackson for a load increase		
	request		
	Install a new 138/69 kV		
	station (Rhodes) to serve as a		
b2885.2	third source to the area to help		AEP (100%)
	relieve overloads caused by		
	the customer load increase		
	Replace Coalton Switch with		
b2885.3	a new three breaker ring bus		AEP (100%)
	(Heppner)		
	Install 90 MVA 138/69 kV		
	transformer, new transformer		
b2886	high and low side 3000 A 40		AEP (100%)
02000	kA CBs, and a 138 kV 40 kA		AEF (100%)
	bus tie breaker at West End		
	Fostoria		
	Add 2-138 kV CB's and		
	relocate 2-138 kV circuit exits		
b2887	to different bays at Morse		AED (1000/)
02887	Road. Eliminate 3 terminal		AEP (100%)
	line by terminating Genoa -		
	Morse circuit at Morse Road		
	Retire Poston substation.		
b2888	Install new Lemaster		AEP (100%)
	substation		
1.2000.1	Remove and retire the Poston		AED (1000/)
b2888.1	138 kV station		AEP (100%)
	Install a new greenfield		
b2888.2	station, Lemaster 138 kV		AEP (100%)
	Station, in the clear		

rtequired 11		Thindar tte vende ttequi	ement Responsible Customer(s)
b2888.3	Relocate the Trimble 69 kV AEP Ohio radial delivery point to 138 kV, to be served off of the Poston – Strouds Run – Crooksville 138 kV circuit via a new three-way switch. Retire the Poston - Trimble 69 kV line		AEP (100%)
b2889	Expand Cliffview station		AEP (100%)
b2889.1	Cliffview Station: Establish 138 kV bus. Install two 138/69 kV XFRs (130 MVA), six 138 kV CBs (40 kA 3000 A) and four 69 kV CBs (40 kA 3000 A)		AEP (100%)
b2889.2	Byllesby – Wythe 69 kV: Retire all 13.77 miles (1/0 CU) of this circuit (~4 miles currently in national forest)		AEP (100%)
b2889.3	Galax – Wythe 69 kV: Retire 13.53 miles (1/0 CU section) of line from Lee Highway down to Byllesby. This section is currently double circuited with Byllesby – Wythe 69 kV. Terminate the southern 3/0 ACSR section into the newly opened position at Byllesby		AEP (100%)
b2889.4	Cliffview Line: Tap the existing Pipers Gap – Jubal Early 138 kV line section. Construct double circuit in/out (~2 miles) to newly established 138 kV bus, utilizing 795 26/7 ACSR conductor		AEP (100%)

required 110	ansinission Emancements	1 minual ic venue requii	ement Responsible Customer(s)
	Rebuild 23.55 miles of the		
	East Cambridge – Smyrna		
b2890.1	34.5 kV circuit with 795		AEP (100%)
	ACSR conductor (128 MVA		
	rating) and convert to 69 kV		
	East Cambridge: Install a		
	2000 A 69 kV 40 kA circuit		
b2890.2	breaker for the East		AEP (100%)
	Cambridge – Smyrna 69 kV		
	circuit		
	Old Washington: Install 69		
b2890.3	kV 2000 A two way phase		AEP (100%)
	over phase switch		
b2890.4	Install 69 kV 2000 A two way		AFD (100%)
UZ09U.4	phase over phase switch		AEP (100%)
	Rebuild the Midland Switch		
	to East Findlay 34.5 kV line		
b2891	(3.31 miles) with 795 ACSR		AEP (100%)
	(63 MVA rating) to match		
	other conductor in the area		
	Install new 138/12 kV		
	transformer with high side		
	circuit switcher at Leon and a		
	new 138 kV line exit towards		
h2002	Ripley. Establish 138 kV at		AED (1000/)
b2892	the Ripley station with a new		AEP (100%)
	138/69 kV 130 MVA		
	transformer and move the		
	distribution load to 138 kV		
	service		
	Rebuild approximately 6.7		
	miles of 69 kV line between		
	Mottville and Pigeon River		
h2026 1	using 795 ACSR conductor		AED (1000/)
b2936.1	(129 MVA rating). New		AEP (100%)
	construction will be designed		
	to 138 kV standards but		
	operated at 69 kV		
	-		

1	· · · · · · · · · · · · · · · · · · ·	1	rement responsible editioner(s)
b2936.2	Pigeon River Station: Replace existing MOAB Sw. 'W' with a new 69 kV 3000 A 40 kA breaker, and upgrade existing relays towards HMD station. Replace CB H with a 3000 A 40 kA breaker		AEP (100%)
b2937	Replace the existing 636 ACSR 138 kV bus at Fletchers Ridge with a larger 954 ACSR conductor		AEP (100%)
b2938	Perform a sag mitigations on the Broadford – Wolf Hills 138 kV circuit to allow the line to operate to a higher maximum temperature		AEP (100%)
b2958.1	Cut George Washington – Tidd 138 kV circuit into Sand Hill and reconfigure Brues & Warton Hill line entrances		AEP (100%)
b2958.2	Add 2 138 kV 3000 A 40 kA breakers, disconnect switches, and update relaying at Sand Hill station		AEP (100%)
b2968	Upgrade existing 345 kV terminal equipment at Tanner Creek station		AEP (100%)
b2969	Replace terminal equipment on Maddox Creek - East Lima 345 kV circuit		AEP (100%)
b2976	Upgrade terminal equipment at Tanners Creek 345 kV station. Upgrade 345 kV bus and risers at Tanners Creek for the Dearborn circuit		AEP (100%)

		1	rement responsible editioner(s)
b2988	Replace the Twin Branch 345 kV breaker "JM" with 63 kA breaker and associated substation works including switches, bus leads, control cable and new DICM		AEP (100%)
b2993	Rebuild the Torrey – South Gambrinus Switch – Gambrinus Road 69 kV line section (1.3 miles) with 1033 ACSR 'Curlew' conductor and steel poles		AEP (100%)
b3000	Replace South Canton 138 kV breaker 'N' with an 80kA breaker		AEP (100%)
b3001	Replace South Canton 138 kV breaker 'N1' with an 80kA breaker		AEP (100%)
b3002	Replace South Canton 138 kV breaker 'N2' with an 80kA breaker		AEP (100%)
b3036	Rebuild 15.6 miles of Haviland - North Delphos 138 kV line		AEP (100%)
b3037	Upgrades at the Natrium substation		AEP (100%)
b3038	Reconductor the Capitol Hill - Coco 138 kV line section		AEP (100%)
b3039	Line swaps at Muskingum 138 kV station		AEP (100%)
b3040.1	Rebuild Ravenswood – Racine tap 69 kV line section (~15 miles) to 69 kV standards, utilizing 795 26/7 ACSR conductor		AEP (100%)

		1	ment responsible editionier(s)
b3040.2	Rebuild existing Ripley – Ravenswood 69 kV circuit (~9 miles) to 69 kV standards, utilizing 795 26/7 ACSR conductor		AEP (100%)
b3040.3	Install new 3-way phase over phase switch at Sarah Lane station to replace the retired switch at Cottageville		AEP (100%)
b3040.4	Install new 138/12 kV 20 MVA transformer at Polymer station to transfer load from Mill Run station to help address overload on the 69 kV network		AEP (100%)
b3040.5	Retire Mill Run station		AEP (100%)
b3040.6	Install 28.8 MVAR cap bank at South Buffalo station		AEP (100%)
b3051.2	Adjust CT tap ratio at Ronceverte 138 kV		AEP (100%)
b3085	Reconductor Kammer – George Washington 138 kV line (approx. 0.08 mile). Replace the wave trap at Kammer 138 kV		AEP (100%)
b3086.1	Rebuild New Liberty – Findlay 34 kV line Str's 1–37 (1.5 miles), utilizing 795 26/7 ACSR conductor		AEP (100%)
b3086.2	Rebuild New Liberty – North Baltimore 34 kV line Str's 1- 11 (0.5 mile), utilizing 795 26/7 ACSR conductor		AEP (100%)

Rebuild West McIrose — Whirlpool 34 kV line Str's 55-80 (1 mile), utilizing 795 26/7 ACSR conductor  North Findlay station: Install a 138 kV 3000A 63kA line breaker and low side 34.5 kV 2000A 40kA breaker, high side 138 kV circuit switcher on T1  Ebersole station: Install second 90 MVA 138/69/34 kV transformer. Install two low side (69 kV) 2000A 40kA breakers for T1 and T2  Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A 40kA 138/8 kV breakers laid out in a ring arrangement, two 30 MVA 138/12 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek — Cedar Creek 138 kV circuit	Required 11	ansinission Emiancements	Annual Revenue Requi	rement Responsible Customer(s)
North Findlay station: Install a 138 kV 3000A 63kA line breaker and low side 34.5 kV 2000A 40kA breaker, high side 138 kV circuit switcher on T1  Ebersole station: Install second 90 MVA 138/69/34 kV transformer. Install two low side (69 kV) 2000A 40kA breakers for T1 and T2  Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —	b3086.3	Whirlpool 34 kV line Str's 55–80 (1 mile), utilizing 795		AEP (100%)
a 138 kV 3000A 63kA line breaker and low side 34.5 kV 2000A 40kA breaker, high side 138 kV circuit switcher on T1  Ebersole station: Install second 90 MVA 138/69/34 kV transformer. Install two low side (69 kV) 2000A 40kA breakers for T1 and T2  Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek –				
b3086.4 breaker and low side 34.5 kV 2000A 40kA breaker, high side 138 kV circuit switcher on T1  Ebersole station: Install second 90 MVA 138/69/34 kV transformer. Install two low side (69 kV) 2000A 40kA breakers for T1 and T2  Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —				
b3086.4  2000A 40kA breaker, high side 138 kV circuit switcher on T1  Ebersole station: Install second 90 MVA 138/69/34 kV transformer. Install two low side (69 kV) 2000A 40kA breakers for T1 and T2  Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —				
side 138 kV circuit switcher on T1  Ebersole station: Install second 90 MVA 138/69/34 kV transformer. Install two low side (69 kV) 2000A 40kA breakers for T1 and T2  Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —	b3086.4			AEP (100%)
b3086.5   Ebersole station: Install second 90 MVA 138/69/34   kV transformer. Install two low side (69 kV) 2000A   40kA breakers for T1 and T2    Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A   40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired    Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —	03000.1	_		1121 (10070)
Ebersole station: Install second 90 MVA 138/69/34 kV transformer. Install two low side (69 kV) 2000A 40kA breakers for T1 and T2  Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —				
second 90 MVA 138/69/34 kV transformer. Install two low side (69 kV) 2000A 40kA breakers for T1 and T2  Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A b3087.1 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek –				
b3086.5 kV transformer. Install two low side (69 kV) 2000A 40kA breakers for T1 and T2  Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A b3087.1 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek –		Ebersole station: Install		
low side (69 kV) 2000A 40kA breakers for T1 and T2  Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —		second 90 MVA 138/69/34		
40kA breakers for T1 and T2  Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A  b3087.1 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —	b3086.5	kV transformer. Install two		AEP (100%)
Construct a new greenfield station to the west (approx. 1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek –		low side (69 kV) 2000A		
station to the west (approx.  1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A  40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —		40kA breakers for T1 and T2		
1.5 miles) of the existing Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A  b3087.1 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —		Construct a new greenfield		
Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A  b3087.1 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —		station to the west (approx.		
Fords Branch Station in the new Kentucky Enterprise Industrial Park. This station will consist of six 3000A  b3087.1 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —		1.5 miles) of the existing		
Industrial Park. This station will consist of six 3000A  40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —		Fords Branch Station in the		
Industrial Park. This station will consist of six 3000A  40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —		new Kentucky Enterprise		
b3087.1 40kA 138 kV breakers laid out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —				
out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —  AEP (100%)				
out in a ring arrangement, two 30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —  AEP (100%)	b3087.1	40kA 138 kV breakers laid		AEP (100%)
30 MVA 138/34.5 kV transformers, and two 30 MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —  AEP (100%)				` ,
MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —  AEP (100%)				
MVA 138/12 kV transformers. The existing Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —  AEP (100%)		transformers, and two 30		
Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —  AEP (100%)		The state of the s		
Fords Branch Station will be retired  Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek —  AEP (100%)		transformers. The existing		
b3087.2 Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek –  AEP (100%)				
b3087.2 Construct approximately 5 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek –  AEP (100%)				
b3087.2 miles of new double circuit 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek –  AEP (100%)				
b3087.2 138 kV line in order to loop the new Kewanee station into the existing Beaver Creek –				
the new Kewanee station into the existing Beaver Creek –				177 (100)
the existing Beaver Creek –	b3087.2			AEP (100%)
		<u> </u>		

required 11	ansimission Emiancements	7 Hilliaar Ne venae Requi	rement Responsible Customer(s)
b3087.3	Remote end work will be required at Cedar Creek		AEP (100%)
03087.3	Station		ALF (100%)
1-2007.4	Install 28.8 MVar switching		AED (1000/)
b3087.4	shunt at the new Fords		AEP (100%)
	Branch substation		
	Rebuild Lakin – Racine Tap		
b3095	69 kV line section (9.2 miles)		AEP (100%)
	to 69 kV standards, utilizing		(,-,
	795 26/7 ACSR conductor		
	Install a 138 kV 3000A 40 kA		
	circuit switcher on the high		
b3099	side of the existing 138/34.5		AEP (100%)
	kV transformer No.5 at		
	Holston station		
	Replace the 138 kV MOAB		
	switcher "YY" with a new		
b3100	138 kV circuit switcher on the		AEP (100%)
	high side of Chemical		
	transformer No.6		
	Rebuild the 1/0 Cu. conductor		
	sections (approx. 1.5 miles) of		
	the Fort Robinson – Moccasin		
	Gap 69 kV line section		
1.2101	(approx. 5 miles) utilizing		A 777 (4000)
b3101	556 ACSR conductor and		AEP (100%)
	upgrade existing relay trip		
	limit (WN/WE: 63 MVA, line		
	limited by remaining		
	conductor sections)		
	Replace existing 50 MVA		
	138/69 kV transformers #1		
b3102	and #2 (both 1957 vintage) at		AEP (100%)
03102	Fremont station with new 130		1111 (10070)
	MVA 138/69 kV transformers		
	IVIVA 130/03 KV transformers		

		 rement responsible editorner(s)
	Install a 138/69 kV	
	transformer at Royerton	
	station. Install a 69 kV bus	
	with one 69 kV breaker	
b3103.1	toward Bosman station.	AEP (100%)
03103.1	Rebuild the 138 kV portion	ALI (100%)
	into a ring bus configuration	
	built for future breaker and a	
	half with four 138 kV	
	breakers	
	Rebuild the	
	Bosman/Strawboard station in	
1 2102 2	the clear across the road to	A FID (1000()
b3103.2	move it out of the flood plain	AEP (100%)
	and bring it up to 69 kV	
	standards	
	Retire 138 kV breaker L at	
1 2102 2	Delaware station and re-	A ED (1000()
b3103.3	purpose 138 kV breaker M	AEP (100%)
	for the Jay line	
	Retire all 34.5 kV equipment	
1.2102	at Hartford City station. Re-	1 FD (1000()
b3103.4	purpose breaker M for the	AEP (100%)
	Bosman line 69 kV exit	
	Rebuild the 138 kV portion of	
	Jay station as a 6 breaker,	
	breaker and a half station re-	
	using the existing breakers	
	"A", "B", and "G." Rebuild	
b3103.5	the 69 kV portion of this	AEP (100%)
	station as a 6 breaker ring bus	
	re-using the 2 existing 69 kV	
	breakers. Install a new 138/69	
	kV transformer	
	K v transformer	

required Tre	ansimission Emianeements	7 miliaar Neverlae Requirem	icht Responsible Customer(s)
	Rebuild the 69 kV Hartford		
	City – Armstrong Cork line		
b3103.6	but instead of terminating it		AEP (100%)
	into Armstrong Cork,		
	terminate it into Jay station		
b3103.7	Build a new 69 kV line from		AEP (100%)
03103.7	Armstrong Cork – Jay station		7121 (10070)
	Rebuild the 34.5 kV		
	Delaware – Bosman line as		
b3103.8	the 69 kV Royerton –		AEP (100%)
03103.6	Strawboard line. Retire the		AEI (100%)
	line section from Royerton to		
	Delaware stations		
	Perform a sag study on the		
	Polaris – Westerville 138 kV		
b3104	line (approx. 3.6 miles) to		AEP (100%)
	increase the summer		ALI (100%)
	emergency rating to 310		
	MVA		
	Rebuild the Delaware – Hyatt		
	138 kV line (approx. 4.3		
b3105	miles) along with replacing		AEP (100%)
	conductors at both Hyatt and		
	Delaware substations		
	Perform a sag study (6.8		
	miles of line) to increase the		
	SE rating to 310 MVA. Note		
b3106	that results from the sag study		AEP (100%)
	could cover a wide range of		
	outcomes, from no work		
	required to a complete rebuild		
	Rebuild 5.2 miles Bethel –		
b3109	Sawmill 138 kV line		AEP (100%)
	including ADSS		

	distinssion Emidicements	Tamana Tito , onto a Tito qua	terrient responsible editorier(s)
b3112	Construct a single circuit 138 kV line (approx. 3.5 miles) from Amlin to Dublin using 1033 ACSR Curlew (296 MVA SN), convert Dublin station into a ring configuration, and reterminating the Britton UG cable to Dublin station		AEP (100%)
b3116	Replace existing Mullens 138/46 kV 30 MVA transformer No.4 and associated protective equipment with a new 138/46 kV 90 MVA transformer and associated protective equipment		AEP (100%)
b3118.1	Expand existing Chadwick station and install a second 138/69 kV transformer at a new 138 kV bus tied into the Bellefonte – Grangston 138 kV circuit. The 69 kV bus will be reconfigured into a ring bus arrangement to tie the new transformer into the existing 69 kV via installation of four 3000A 63 kA 69 kV circuit breakers		AEP (100%)
b3118.2	Perform 138 kV remote end work at Grangston station		AEP (100%)
b3118.3	Perform 138 kV remote end work at Bellefonte station		AEP (100%)
b3118.4	Relocate the Chadwick – Leach 69 kV circuit within Chadwick station		AEP (100%)

Terminate the Bellefonte — Grangston 138 kV circuit to the Chadwick 138 kV bus  Chadwick - Tri-State #2 138 kV circuit will be reconfigured within the station to terminate into the newly established 138 kV bus #2 at Chadwick due to construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit  AEP (100%)  AEP (100%)
the Chadwick 138 kV bus  Chadwick – Tri-State #2 138     kV circuit will be     reconfigured within the  station to terminate into the     newly established 138 kV bus     #2 at Chadwick due to     construability aspects  Reconductor Chadwick —     Leach and Chadwick —     England Hill 69 kV lines with     795 ACSS conductor.  b3118.7 Perform a LiDAR survey and     a sag study to confirm that the     reconductored circuits would     maintain acceptable     clearances  Replace the 20 kA 69 kV     circuit breaker 'F' at South     Neal station with a new  AEP (100%)
Chadwick – Tri-State #2 138
kV circuit will be reconfigured within the station to terminate into the newly established 138 kV bus #2 at Chadwick due to construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AEP (100%)
reconfigured within the station to terminate into the newly established 138 kV bus #2 at Chadwick due to construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor. Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AEP (100%)
b3118.6 station to terminate into the newly established 138 kV bus #2 at Chadwick due to construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AEP (100%)
newly established 138 kV bus #2 at Chadwick due to construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AEP (100%)
#2 at Chadwick due to construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AEP (100%)
construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AEP (100%)
Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AEP (100%)
Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor. Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AEP (100%)
England Hill 69 kV lines with 795 ACSS conductor.  b3118.7 Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AEP (100%)
795 ACSS conductor. Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AEP (100%)
b3118.7 Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AEP (100%)
a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new
reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new
maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new
clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new  AFP (100%)
Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new
circuit breaker 'F' at South Neal station with a new
Neal station with a new
1 63118 X 1
3000A 40 kA 69 kV circuit
breaker. Replace line risers
towards Leach station
Rebuild 336 ACSR portion of
b3118.9 Leach – Miller S.S 69 kV line AEP (100%)
section (approx. 0.3 mile)
with 795 ACSS conductor
Replace 69 kV line risers
b3118.10 (towards Chadwick) at Leach AEP (100%)
station
Rebuild the Jay – Pennville
138 kV line as double circuit
b3119.1   138/69 kV. Build a new 9.8   AEP (100%)
b3119.1   b3119.1   mile single circuit 69 kV line   AEP (100%)
from near Pennville station to
North Portland station

b3119.2	Install three (3) 69 kV breakers to create the "U" string and add a low side breaker on the Jay transformer 2	AEP (100%)
b3119.3	Install two (2) 69 kV breakers at North Portland station to complete the ring and allow for the new line	AEP (100%)
b3129	At Conesville 138 kV station: Remove line leads to generating units, transfer plant AC service to existing station service feeds in Conesville 345/138 kV yard, and separate and reconfigure protection schemes	AEP (100%)
b3131	At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility	AEP (100%)
b3132	Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR	AEP (100%)
b3139	Rebuild the Garden Creek – Whetstone 69 kV line (approx. 4 miles)	AEP (100%)
b3140	Rebuild the Whetstone – Knox Creek 69 kV line (approx. 3.1 miles)	AEP (100%)
b3141	Rebuild the Knox Creek – Coal Creek 69 kV line (approx. 2.9 miles)	AEP (100%)

1	distinssion Emidicements	 rement responsible editioner(s)
b3148.1	Rebuild the 46 kV Bradley – Scarbro line to 96 kV standards using 795 ACSR to achieve a minimum rate of 120 MVA. Rebuild the new line adjacent to the existing one leaving the old line in service until the work is completed	AEP (100%)
b3148.2	Bradley remote end station work, replace 46 kV bus, install new 12 MVAR capacitor bank	AEP (100%)
b3148.3	Replace the existing switch at Sun substation with a 2-way SCADA-controlled motor-operated air-breaker switch	AEP (100%)
b3148.4	Remote end work and associated equipment at Scarbro station	AEP (100%)
b3148.5	Retire Mt. Hope station and transfer load to existing Sun station	AEP (100%)
b3149	Rebuild the 2.3 mile Decatur  – South Decatur 69 kV line using 556 ACSR	AEP (100%)
b3150	Rebuild Ferguson 69/12 kV station in the clear as the 138/12 kV Bear station and connect it to an approx. 1 mile double circuit 138 kV extension from the Aviation – Ellison Road 138 kV line to remove the load from the 69 kV line	AEP (100%)

		1	1
b3151.1	Rebuild the 30 mile Gateway  - Wallen 34.5 kV circuit as the 27 mile Gateway - Wallen 69 kV line		AEP (100%)
b3151.2	Retire approx. 3 miles of the Columbia – Whitley 34.5 kV line		AEP (100%)
b3151.3	At Gateway station, remove all 34.5 kV equipment and install one (1) 69 kV circuit breaker for the new Whitley line entrance		AEP (100%)
b3151.4	Rebuild Whitley as a 69 kV station with two (2) lines and one (1) bus tie circuit breaker		AEP (100%)
b3151.5	Replace the Union 34.5 kV switch with a 69 kV switch structure		AEP (100%)
b3151.6	Replace the Eel River 34.5 kV switch with a 69 kV switch structure		AEP (100%)
b3151.7	Install a 69 kV Bobay switch at Woodland station		AEP (100%)
b3151.8	Replace the Carroll and Churubusco 34.5 kV stations with the 69 kV Snapper station. Snapper station will have two (2) line circuit breakers, one (1) bus tie circuit breaker and a 14.4 MVAR cap bank		AEP (100%)
b3151.9	Remove 34.5 kV circuit breaker "AD" at Wallen station		AEP (100%)
b3151.10	Rebuild the 2.5 miles of the Columbia – Gateway 69 kV line		AEP (100%)

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.)

110 401100 111	distinssion Emidicements	1 1111101011 1 10 1 011010 1 10 0 011	rement responsible editioner(s)
	Rebuild Columbia station in		
	the clear as a 138/69 kV		
	station with two (2) 138/69		
b3151.11	kV transformers and 4-		AEP (100%)
03131.11	breaker ring buses on the high		AEF (100%)
	and low side. Station will		
	reuse 69 kV breakers "J" &		
	"K" and 138 kV breaker "D"		
	Rebuild the 13 miles of the		
b3151.12	Columbia – Richland 69 kV		AEP (100%)
	line		
	Rebuild the 0.5 mile Whitley		
b3151.13	– Columbia City No.1 line as		AEP (100%)
	69 kV		
	Rebuild the 0.5 mile Whitley		
b3151.14	– Columbia City No.2 line as		AEP (100%)
	69 kV		
	Rebuild the 0.6 mile double		
	circuit section of the Rob		
b3151.15	Park – South Hicksville / Rob		AEP (100%)
	Park – Diebold Road as 69		
	kV		
	Construct an approx. 2.4		
	miles double circuit 138 kV		
b3160.1	extension using 1033 ACSR		AEP (100%)
03100.1	(Aluminum Conductor Steel		ALI (100%)
	Reinforced) to connect Lake		
	Head to the 138 kV network		
b3160.2	Retire the approx.2.5 miles		
	34.5 kV Niles – Simplicity		AEP (100%)
	Tap line		
b3160.3	Retire the approx.4.6 miles		AEP (100%)
03100.3	Lakehead 69 kV Tap		AEF (100%)

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 Emianecinents		Annual Revenue Requi	ichichi Responsibie Cusionici(s)
b3160.4	Build new 138/69 kV drop down station to feed Lakehead with a 138 kV breaker, 138 kV switcher, 138/69 kV transformer and a 138 kV Motor-Operated Air Break		AEP (100%)
b3160.5	Rebuild the approx.1.2 miles Buchanan South 69 kV Radial Tap using 795 ACSR (Aluminum Conductor Steel Reinforced)		AEP (100%)
b3160.6	Rebuild the approx.8.4 miles 69 kV Pletcher – Buchanan Hydro line as the approx. 9 miles Pletcher – Buchanan South 69 kV line using 795 ACSR (Aluminum Conductor Steel Reinforced)		AEP (100%)
b3160.7	Install a PoP (Point-of- Presence) switch at Buchanan South station with 2 line MOABs (Motor-Operated Air Break)		AEP (100%)

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 11	ansimission Emiancements	Amuai Revenue Require	then Responsible Customer(s)
	Retire approximately 38		
	miles of the 44 mile Clifford		
	<ul> <li>Scottsville 46 kV circuit.</li> </ul>		
	Build new 138 kV "in and		
	out" to two new distribution		
	stations to serve the load		
	formerly served by Phoenix,		
	Shipman, Schuyler (AEP),		
	and Rockfish stations.		
	Construct new 138 kV lines		
b3208	from Joshua Falls – Riverville		AEP (100%)
	(approx. 10 miles) and		
	Riverville – Gladstone		
	(approx. 5 miles). Install		
	required station upgrades at		
	Joshua Falls, Riverville and		
	Gladstone stations to		
	accommodate the new 138		
	kV circuits. Rebuild Reusen –		
	Monroe 69 kV (approx. 4		
	miles)		
	Rebuild the 10.5 mile Berne –		
b3209	South Decatur 69 kV line		AEP (100%)
	using 556 ACSR		
	Replace approx. 0.7 mile		
b3210	Beatty – Galloway 69 kV line		AEP (100%)
	with 4000 kcmil XLPE cable		

#### SCHEDULE 12 – APPENDIX A

### (18) Duquesne Light Company

required 1	Tansinission Emancements Am	iuai Kevenue Kequirement	Responsible Customer(s)
b2175.1	200 MVAR shunt reactor at Brunot Island 345 kV		DL (100%)
b2175.2	200 MVAR shunt reactor on future Brunot Island – Carson 345 kV circuit		DL (100%)
b2198	Revise the reclosing for the Brunot Island 138 kV breaker 'Z-40 COLLIER'		DL (100%)
b2199	Revise the reclosing for the Brunot Island 138 kV breaker 'Z-41 COLLIER'		DL (100%)
b2200	Revise the reclosing for the Crescent 138 kV breaker 'Z- 29 Beaver'		DL (100%)
b2201	Revise the reclosing for the Crescent 138 kV breaker 'Z- 82 VALLEY'		DL (100%)
b2202	Revise the reclosing for the Crescent 138 kV breaker 'Z- 21 NORTH'		DL (100%)
b2203	Revise the reclosing for the Elrama 138 kV breaker 'Z18-USX CLAI'		DL (100%)
b2204	Revise the reclosing for the Elrama 138 kV breaker 'Z13-WEST MIF'		DL (100%)
b2205	Revise the reclosing for the Elrama 138 kV breaker 'Z15 -DRAVOSBU'		DL (100%)
b2206	Revise the reclosing for the Woodville 138 kV breaker 'Z-106 PINEY'		DL (100%)
b2207	Revise the reclosing for the Woodville 138 kV breaker 'Z-64 COLLIER'		DL (100%)
b2208	Revise the reclosing for the Beaver Valley 138 kV breaker 'Z-28 CRESCEN'		DL (100%)

### **Duquesne Light Company (cont.)**

required 1	ransmission enhancements Am	iuai Revenue Requirement	Responsible Customer(s)
b2209	Revise the reclosing for the Cheswick 138 kV breaker Z-51 WILMERD'		DL (100%)
b2280	Replace the USAP 138kV breaker 'XFMR'		DL (100%)
b2303	Revise the reclosing to the Dravosburg 138kV breaker 'Z73 West Mifflin' from 5 sec to 15 sec		DL (100%)
b2563	Operate with the Crescent 345/138 kV #3 autotransformer in-service by replacing 8 overdutied 138 kV breakers at Crescent, 3 138 kV breakers at Beaver Valley, install #1 section 345 kV breaker for 331 circuit at Crescent		DL (100%)
b2632	Replace the Oakland 138 kV 'Z-101 Arsenal' breaker		DL (100%)
b2639	Replace the Crescent 138 kV 'NO3 – 4 138' breaker with a 63kA breaker		DL (100%)
b2640	Replace the Crescent 138 kV 'Z-143 SWCKLY' breaker with a 63kA breaker		DL (100%)
b2641	Replace the Crescent 138 kV 'Z-24 MONTOUR' breaker with a 63kA breaker		DL (100%)
b2642	Replace the Crescent 138 kV 'Z-28 BEAVER' breaker with a 63kA breaker		DL (100%)
b2689.1	Reconductor approximately 7 miles of the Woodville – Peters (Z-117) 138 kV circuit		AEC (0.99%)/ APS (66.14%)/ BGE (4.60%)/ DOM (8.81%)/ DPL (5.83%)/ ECP (0.34%)/ HTP (0.04%)/ Neptune (0.12%)/ PECO (3.39%)/ PEPCO (6.29%)/ PSEG (3.45%)

# **Duquesne Light Company (cont.)**

Required T	ransmission Enhancements	Annual Revenue Requirement	-
b2689.2	Reconfigure West Mifflin- USS Clairton (Z-15) 138 kV circuit to establish Dravosburg-USS Clairton (Z-14) 138 kV circuit and West Mifflin-Wilson (Z-15) 138 kV circuit		AEC (0.99%)/ APS (66.14%)/ BGE (4.60%)/ DOM (8.81%)/ DPL (5.83%)/ ECP (0.34%)/ HTP (0.04%)/ Neptune (0.12%)/ PECO (3.39%)/ PEPCO (6.29%)/ PSEG (3.45%)
b3011.7	Replace the line terminal equipment and line breaker #85 at Dravosburg 138 kV substation in the Elwyn Z-70 line position/bay, with the breaker duty as 63kA		DL (100%)
b3011.8	Upgrade 138 kV breaker "Z-78 Logans" at Dravosburg		DL (100%)
b3012.2	Construct two new ties from a new FirstEnergy substation to a new Duquesne substation by using two separate structures – Duquesne portion		ATSI (38.21%) / DL (61.79%)
b3012.4	Establish the new tie line in place of the existing Elrama  – Mitchell 138 kV line		DL (100%)
b3015.1	Construct new Elrama 138 kV substation and connect 7 138 kV lines to new substation		DL (100%)
b3015.2	Reconductor Elrama to Wilson 138 kV line. 4.8 miles		<del>DL</del> - <u>APS</u> (100%)
b3015.3	Reconductor Dravosburg to West Mifflin 138 kV line. 3 miles		DL (100%)
b3015.4	Run new conductor on existing tower to establish the new Dravosburg – Elrama (Z-75) circuit. 10 miles		DL (100%)

# **Duquesne Light Company (cont.)**

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3015.5	Reconductor Elrama to Mitchell 138 kV line – DL portion. 4.2 miles total. 2x795 ACSS/TW 20/7		DL (100%)
b3015.7	Reconductor Wilson to West Mifflin 138 kV line. 2 miles. 795 ACSS/TW 20/7		DL (100%)
b3061	Reconductor the West Mifflin – Dravosburg (Z-73) and Dravosburg – Elrama (Z-75) 138 kV lines		DL (100%)
b3062	Install 138 kV tie breaker at West Mifflin		DL (100%)
b3063	Reconductor the Wilson – Dravosburg (Z-72) 138 kV line (approx. 5 miles)		DL (100%)
b3064	Expand Elrama 138 kV substation to loop in existing US Steel Clariton – Piney Fork 138 kV line		DL (100%)
b3064.2	Replace the West Mifflin 138 kV breakers "Z-94", "Z-74", "Z-14", and "Z-13" with 63 kA breakers		DL (100%)
b3065	Install 138 kV tie breaker at Wilson		DL (100%)
b3084	Reconductor the Oakland – Panther Hollow 138 kV line (approx. 1 mile)		DL (100%)
b3212	The Crescent 138 kV oil- type breaker "2-5 TIE" is found to be overdutied following a model review and correction to short circuit base case		DL (100%)
b3217	Reconductor Wilson - Mitchell 138 kV line - DL portion		DL (100%)

#### SCHEDULE 12 – APPENDIX A

### (20) Virginia Electric and Power Company

required 1	Tansinission Enhancements Annua	ar Revenue Requirement	responsible editioner(s)
b1698.7	Replace Loudoun 230 kV breaker '203052' with 63kA rating		Dominion (100%)
b1696.1	Replace the Idylwood 230 kV '25112' breaker with 50kA breaker		Dominion (100%)
b1696.2	Replace the Idylwood 230 kV '209712' breaker with 50kA breaker		Dominion (100%)
b1793.1	Remove the Carolina 22 SPS to include relay logic changes, minor control wiring, relay resets and SCADA programming upon completion of project		Dominion (100%)
b2281	Additional Temporary SPS at Bath County		Dominion (100%)
b2350	Reconductor 211 feet of 545.5 ACAR conductor on 59 Line Elmont - Greenwood DP 115 kV to achieve a summer emergency rating of 906 amps or greater		Dominion (100%)
b2358	Install a 230 kV 54 MVAR capacitor bank on the 2016 line at Harmony Village Substation		Dominion (100%)
b2359	Wreck and rebuild approximately 1.3 miles of existing 230 kV line between Cochran Mill - X4-039 Switching Station		Dominion (100%)
b2360	Build a new 39 mile 230 kV transmission line from Dooms - Lexington on existing right- of-way		Dominion (100%)
b2361	Construct 230 kV OH line along existing Line #2035 corridor, approx. 2.4 miles from Idylwood - Dulles Toll Road (DTR) and 2.1 miles on new right-of-way along DTR to new Scott's Run Substation		Dominion (100%)

Required T	Transmission Enhancements Annual	Revenue Requirement	Responsible Customer(s)
b2368	Replace the Brambleton 230 kV breaker '209502' with 63kA breaker		Dominion (100%)
b2369	Replace the Brambleton 230 kV breaker '213702' with 63kA breaker		Dominion (100%)
b2370	Replace the Brambleton 230 kV breaker 'H302' with 63kA breaker		Dominion (100%)
b2373	Build a 2nd Loudoun - Brambleton 500 kV line within the existing ROW. The Loudoun - Brambleton 230 kV line will be relocated as an underbuild on the new 500 kV line		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS  (6.055.61%) / ATSI  (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%)  / DPL (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL  (3.823.84%) / ME (1.881.93%)  / NEPTUNE* (0.420.45%) /  OVEC (0.080.07%) / PECO  (5.315.29%) / PENELEC  (1.901.89%) / PEPCO  (3.903.82%) / PPL  (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)  DFAX Allocation:  APS (30.4625.51%) /  Dominion (69.5474.49%)
b2397	Replace the Beaumeade 230 kV breaker '2079T2116' with 63kA		Dominion (100%)
b2398	Replace the Beaumeade 230 kV breaker '2079T2130' with 63kA		Dominion (100%)
b2399	Replace the Beaumeade 230 kV breaker '208192' with 63kA		Dominion (100%)
b2400	Replace the Beaumeade 230 kV breaker '209592' with 63kA		Dominion (100%)
b2401	Replace the Beaumeade 230 kV breaker '211692' with 63kA		Dominion (100%)

b2402	Replace the Beaumeade 230 kV breaker '227T2130' with 63kA		Dominion (100%)
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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. \*Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements A	Annual Revenue Requirement	Responsible Customer(s)
b2403	Replace the Beaumeade 230 kV breaker '274T2130' with 63kA		Dominion (100%)
b2404	Replace the Beaumeade 230 kV breaker '227T2095' with 63kA		Dominion (100%)
b2405	Replace the Pleasant view 230 kV breaker '203T274' with 63kA		Dominion (100%)
b2443	Construct new underground 230 kV line from Glebe to Station C, rebuild Glebe Substation, construct 230 kV high side bus at Station C with option to install 800 MVA PAR		Dominion (97.11%) / ME (0.18%) / PEPCO (2.71%)
b2443.1	Replace the Idylwood 230 kV breaker '203512' with 50kA		Dominion (100%)
b2443.2	Replace the Ox 230 kV breaker '206342' with 63kA breaker		Dominion (100%)
b2443.3	Glebe – Station C PAR		DFAX Allocation: Dominion (22.57%) / PEPCO (77.43%)
b2443.6	Install a second 500/230 kV transformer at Possum Point substation and replace bus work and associated equipment as needed		Dominion (100%)
b2443.7	Replace 19 63kA 230 kV breakers with 19 80kA 230 kV breakers		Dominion (100%)
b2457	Replace 24 115 kV wood h-frames with 230 kV Dominion pole H-frame structures on the Clubhouse – Purdy 115 kV line		Dominion (100%)
b2458.1	Replace 12 wood H-frame structures with steel H- frame structures and install shunts on all conductor splices on Carolina – Woodland 115 kV		Dominion (100%)

Required T	ransmission Enhancements A	annual Revenue Requirement	Responsible Customer(s)
b2458.2	Upgrade all line switches and substation components at Carolina 115 kV to meet or exceed new conductor rating of 174 MVA		Dominion (100%)
b2458.3	Replace 14 wood H-frame structures on Carolina – Woodland 115 kV		Dominion (100%)
b2458.4	Replace 2.5 miles of static wire on Carolina – Woodland 115 kV		Dominion (100%)
b2458.5	Replace 4.5 miles of conductor between Carolina 115 kV and Jackson DP 115 kV with min. 300 MVA summer STE rating; Replace 8 wood H-frame structures located between Carolina and Jackson DP with steel H-frames		Dominion (100%)
b2460.1	Replace Hanover 230 kV substation line switches with 3000A switches		Dominion (100%)
b2460.2	Replace wave traps at Four River 230 kV and Elmont 230 kV substations with 3000A wave traps		Dominion (100%)
b2461	Wreck and rebuild existing Remington CT – Warrenton 230 kV (approx. 12 miles) as a double-circuit 230 kV line		Dominion (100%)
b2461.1	Construct a new 230 kV line approximately 6 miles from NOVEC's Wheeler Substation a new 230 kV switching station in Vint Hill area		Dominion (100%)
b2461.2	Convert NOVEC's Gainesville – Wheeler line (approximately 6 miles) to 230 kV		Dominion (100%)
b2461.3	Complete a Vint Hill – Wheeler – Loudoun 230 kV networked line		Dominion (100%)

Required 1	ransmission Enhancements Annua	al Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> 14. <del>04</del> %) / APS
			( <del>6.05</del> 5.61%) / ATSI
			( <del>7.92</del> 8.10%) / BGE
			(4.234.36%) / ComEd
			` /
			$(\frac{13.2013.14}{0.052.15}\%)$ / Dayton
	Replace Midlothian 500 kV		(2.052.15%) / DEOK
	breaker 563T576 and motor		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %)
	operated switches with 3		/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
b2471	breaker 500 kV ring bus.		( <del>12.56</del> <u>13.03</u> %) / EKPC
02471	Terminate Lines # 563 Carson		( <del>1.94<u>1.77</u>%) / JCPL</del>
	– Midlothian, #576		( <del>3.82</del> <u>3.84</u> %) / ME ( <del>1.88</del> <u>1.93</u> %)
	Midlothian –North Anna, Transformer #2 in new ring		/ NEPTUNE* ( <del>0.42</del> 0.45%) /
	Transformer #2 in new ring		OVEC ( <del>0.08</del> 0.07%) / PECO
			( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			( <del>3.90</del> 3.82%) / PPL
			( <del>5.00</del> 4.72%) / PSEG
			`
			( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
	D 1 1111151111 1100		Dominion (100%)
	Rebuild 115 kV Line #32		
	from Halifax-South Boston (6 miles) for min. of 240 MVA		
b2504	and transfer Welco tap to Line		
02301	#32. Moving Welco to Line		Dominion (100%)
	#32 requires disabling auto-		
	sectionalizing scheme		
	Install structures in river to		
1.2525	remove the 115 kV #65 line		
b2505	(Whitestone-Harmony Village		Dominion (100%)
	115 kV) from bridge and improve reliability of the line		(,
	Replace the Loudoun 500 kV		
b2542	'H2T502' breaker with a		
02312	50kA breaker		Dominion (100%)
	Replace the Loudoun 500 kV		
b2543	'H2T584' breaker with a		Dominion (100%)
	50kA breaker		Dominion (100%)
107-5	Reconductor wave trap at		
b2565	Carver Substation with a		Dominion (100%)
	2000A wave trap Reconductor 1.14 miles of		
	existing line between ACCA		
b2566	and Hermitage and upgrade		Dominion (100%)
	associated terminal equipment		Dominion (10070)
	strates terminal equipment		

Load-Ratio Share Allocation:   AEC (4.721.71%) / AEP	Required 1	ransmission Enhancements A	annual Revenue Requirement	Responsible Customer(s)
Description   Continue   Contin				<b>Load-Ratio Share Allocation:</b>
B2582   Rebuild the Elmont — Cunningham 500 kV line   Cunningham 500				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
December 20   Company   December 20   Dece				( <del>14.18</del> <u>14.04</u> %) / APS
December 20   Company   December 20   Dece				( <del>6.05</del> 5.61%) / ATSI
B2582   Rebuild the Elmont -				,
B2582   Rebuild the Elmont -				, ,
B2582   Rebuild the Elmont -				`
Rebuild the Elmont - Cunningham 500 kV line   (3.183.23%) / DL (1.681.73%)     Rebuild the Elmont - Cunningham 500 kV line   (1.25613.03%) / EKPC     (1.941.77%) / JCPL     (3.823.84%) / ME (1.881.93%)     NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO     (5.315.29%) / PENELEC     (1.901.89%) / PEPCO     (3.903.82%) / PPL     (5.004.72%) / PSEG     (6.156.21%) / RE (0.250.26%)     DFAX Allocation: APS (9.27%) / Dominion     (90.73100%)     Dominion (100%)				,
DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.980.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)				`
B2582   Rebuild the Elmont -				` / ` /
b2582   Rebuild the Elmont — Cunningham 500 kV line   (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)   DFAX Allocation: APS (0.27%) / Dominion (90.73100%)				` /
Cummingnam 300 kV line   (3.823.84%) / ME (4.881.93%)     NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO     (5.315.29%) / PENELEC     (1.901.89%) / PEPCO     (3.903.82%) / PPL     (5.004.72%) / PSEG     (6.156.21%) / RE (0.250.26%)     DFAX Allocation:     APS (9.27%) / Dominion     (90.73100%)     Dominion (100%)     Dom	b2582			` /
NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)	02362	Cunningham 500 kV line		`
DVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)				, , ,
b2583    Signature   Signature				`
b2583  Install 500 kV breaker at Ox Substation to remove Ox Tx#1 from H1T561 breaker failure outage.  Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line  (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / PSEG (6.156.21%) / RE (0.250.26%)  DFAX Allocation: APS (9.27%) / Dominion (90.73100%)  Dominion (100%)  Dominion (100%)				`
b2583  Install 500 kV breaker at Ox Substation to remove Ox Tx#1 from H1T561 breaker failure outage.  Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line  (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)  DFAX Allocation:  APS (9.27%) / Dominion (90.73100%)  Dominion (100%)  Dominion (100%)				`
b2583  Install 500 kV breaker at Ox Substation to remove Ox Tx#1 from H1T561 breaker failure outage.  Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line  (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)  DFAX Allocation:  APS (9.27%) / Dominion (90.73100%)  Dominion (100%)  Dominion (100%)				
b2583  Install 500 kV breaker at Ox Substation to remove Ox Tx#1 from H1T561 breaker failure outage.  Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line  (6.156.21%) / RE (0.250.26%)  DFAX Allocation:  (90.73100%)  Dominion (100%)  Dominion (100%)				, , ,
b2583  Install 500 kV breaker at Ox Substation to remove Ox Tx#1 from H1T561 breaker failure outage.  Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville b2584  230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line  DFAX Allocation: APS (9.27%) / Dominion (90.73100%)  Dominion (100%)				`
b2583 Install 500 kV breaker at Ox Substation to remove Ox Tx#1 from H1T561 breaker failure outage.  Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line				
Install 500 kV breaker at Ox Substation to remove Ox Tx#1 from H1T561 breaker failure outage.  Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line				
Install 500 kV breaker at Ox Substation to remove Ox Tx#1 from H1T561 breaker failure outage.  Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line				
b2583 Ox Substation to remove Ox Tx#1 from H1T561 breaker failure outage.  Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line		Install 500 kW has been at	-	( <del>90.73</del> 100%)
Dominion (100%)  Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line				
breaker failure outage.  Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville b2584 230 kV) line and Cartersville distribution station to #2027 (Bremo- Midlothian 230 kV) line	b2583			Dominion (100%)
(transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo- Midlothian 230 kV) line				
(Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo- Midlothian 230 kV) line  Dominion (100%)				
b2584 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line				
Cartersville distribution station to #2027 (Bremo- Midlothian 230 kV) line	h2504			Dominion (100%)
station to #2027 (Bremo- Midlothian 230 kV) line	02364			Dominion (100%)
Midlothian 230 kV) line				
		Midlothian 230 kV) line		
		Reconductor 7.63 miles of		
existing line between Cranes and Stafford, PEPCO (100%)	b2585	existing line between		DEDCO (100%)
b2585 Cranes and Stafford, upgrade associated line PEPCO (100%)				PEPCO (100%)
switches at Stafford				
Wreck and rebuild the		Wreck and rebuild the		
Chesapeake – Deep Creek		Chesapeake – Deep Creek		
- Bowers Hill - Hodges	b2620			
b2620 Ferry 115 kV line; Dominion (100%)				Dominion (100%)
minimum rating 239 MVA normal/emergency,				
275 MVA load dump				
		rating		

Required T	ransmission Enhancements An	nual Revenue Requirement	Responsible Customer(s)
b2622	Rebuild Line #47 between Kings Dominion 115 kV and Fredericksburg 115 kV to current standards with summer emergency rating of 353 MVA at 115 kV		Dominion (100%)
b2623	Rebuild Line #4 between Bremo and Structure 8474 (4.5 miles) to current standards with a summer emergency rating of 261 MVA at 115 kV		Dominion (100%)
b2624	Rebuild 115 kV Lines #18 and #145 between Possum Point Generating Station and NOVEC's Smoketown DP (approx. 8.35 miles) to current 230 kV standards with a normal continuous summer rating of 524 MVA at 115 kV		Dominion (100%)
b2625	Rebuild 115 kV Line #48 between Thole Street and Structure 48/71 to current standard. The remaining line to Sewells Point is 2007 vintage. Rebuild 115 kV Line #107 line, Sewells Point to Oakwood, between structure 107/17 and 107/56 to current standard.		Dominion (100%)
b2626	Rebuild 115 kV Line #34 between Skiffes Creek and Yorktown and the double circuit portion of 115 kV Line #61 to current standards with a summer emergency rating of 353 MVA at 115 kV Rebuild 115 kV Line #1		Dominion (100%)
b2627	Rebuild 115 kV Line #1 between Crewe 115 kV and Fort Pickett DP 115 kV (12.2 miles) to current standards with summer emergency rating of 261 MVA at 115 kV		Dominion (100%)

required 1	ransinission Emiancements Anni	iai Revenue Requirement	Responsible Customer(s)
b2628	Rebuild 115 kV Line #82 Everetts – Voice of America (20.8 miles) to current standards with a summer emergency rating of 261 MVA at 115 kV		Dominion (100%)
b2629	Rebuild the 115 kV Lines #27 and #67 lines from Greenwich 115 kV to Burton 115 kV Structure 27/280 to current standard with a summer emergency rating of 262 MVA at 115 kV		Dominion (100%)
b2630	Install circuit switchers on Gravel Neck Power Station GSU units #4 and #5. Install two 230 kV CCVT's on Lines #2407 and #2408 for loss of source sensing		Dominion (100%)
b2636	Install three 230 kV bus breakers and 230 kV, 100 MVAR Variable Shunt Reactor at Dahlgren to provide line protection during maintenance, remove the operational hazard and provide voltage reduction during light load conditions		Dominion (100%)
b2647	during light load conditions  Rebuild Boydton Plank Rd –  Kerr Dam 115 kV Line #38  (8.3 miles) to current  standards with summer  emergency rating of 353  MVA at 115 kV.		Dominion (100%)
b2648	Rebuild Carolina – Kerr Dam 115 kV Line #90 (38.7 miles) to current standards with summer emergency rating of 353 MVA 115 kV.		Dominion (100%)
b2649	Rebuild Clubhouse – Carolina 115 kV Line #130 (17.8 miles) to current standards with summer emergency rating of 353 MVA at 115 kV.		Dominion (100%)

Requirea 1	ransmission Enhancements Anni	ual Revenue Requirement	Responsible Customer(s)
b2649.1	Rebuild of 1.7 mile tap to Metcalf and Belfield DP (MEC) due to poor condition. The existing summer rating of the tap is 48 MVA and existing conductor is 4/0 ACSR on wood H-frames. The proposed new rating is 176 MVA using 636 ACSR conductor		Dominion (100%)
b2649.2	Rebuild of 4.1 mile tap to Brinks DP (MEC) due to wood poles built in 1962. The existing summer rating of the tap is 48 MVA and existing conductor is 4/0 ACSR and 393.6 ACSR on wood H-frames. The proposed new rating is 176 MVA using 636 ACSR conductor		Dominion (100%)
b2650	Rebuild Twittys Creek – Pamplin 115 kV Line #154 (17.8 miles) to current standards with summer emergency rating of 353 MVA at 115 kV.		Dominion (100%)

Required 11	ansinission Emancements Anno	iai Revenue Requirement	Responsible Customer(s)
b2651	Rebuild Buggs Island – Plywood 115 kV Line #127 (25.8 miles) to current standards with summer emergency rating of 353 MVA at 115 kV. The line should be rebuilt for 230 kV and operated at 115 kV.		Dominion (100%)
b2652	Rebuild Greatbridge – Hickory 115 kV Line #16 and Greatbridge – Chesapeake E.C. to current standard with summer emergency rating of 353 MVA at 115 kV.		Dominion (100%)
b2653.1	Build 20 mile 115 kV line from Pantego to Trowbridge with summer emergency rating of 353 MVA.		Dominion (100%)
b2653.2	Install 115 kV four-breaker ring bus at Pantego		Dominion (100%)
b2653.3	Install 115 kV breaker at Trowbridge		Dominion (100%)
b2654.1	Build 15 mile 115 kV line from Scotland Neck to S Justice Branch with summer emergency rating of 353 MVA. New line will be routed to allow HEMC to convert Dawson's Crossroads RP from 34.5 kV to 115 kV.		Dominion (100%)
b2654.2	Install 115 kV three-breaker ring bus at S Justice Branch		Dominion (100%)
b2654.3	Install 115 kV breaker at Scotland Neck		Dominion (100%)
b2654.3	Install a 2nd 224 MVA 230/115 kV transformer at Hathaway		Dominion (100%)

Required Tra	ansmission Enhancements Annu	al Revenue Requirement	Responsible Customer(s)
			<b>Load-Ratio Share Allocation:</b>
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> <u>14.04</u> %) / APS
			( <del>6.05</del> 5.61)%) / ATSI
			( <del>7.92</del> 8.10%) / BGE
			(4.234.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
			( <del>3.18</del> 3.23%) / DL ( <del>1.68</del> 1.73%)
			/ DPL ( <del>2.58</del> 2.65%) / Dominion
			( <del>12.56</del> 13.03%) / EKPC
b2665	Rebuild the Cunningham – Dooms 500 kV line		( <del>1.94</del> 1.77%) / JCPL
	Dooms 300 kv me		(3.823.84%) / ME (1.881.93%)
			/ NEPTUNE* ( <del>0.42</del> 0.45%) /
			OVEC (0.080.07%) / PECO
			( <del>5.31</del> 5.29%) / PENELEC
			( <del>1.90</del> 1.89%) / PEPCO
			$(\frac{3.90}{3.82\%})$ / PPL
			( <del>5.004</del> .72%) / PSEG
			( <del>6.156.21</del> %) / RE ( <del>0.250.26</del> %)
1			
			DFAX Allocation:
			Dominion (100%)
b2686	Pratts Area Improvement		Dominion (100%)
02000	-		Bollillion (100%)
	Build a 230 kV line from		
b2686.1	Remington Substation to Gordonsville Substation		Dominion (100%)
	utilizing existing ROW		` '
	Install a 3rd 230/115 kV		
b2686.2	transformer at Gordonsville		Dominion (100%)
	Substation		. ,
	Upgrade Line 2088		
b2686.3	between Gordonsville Substation and Louisa CT		Dominion (100%)
	Station Station		
	Replace the Remington CT		
b2686.4	230 kV breaker		Dominion (100%)
02000.7	"2114T2155" with a 63 kA		Dominion (10070)
	breaker Upgrading sections of the		
b2686.11	Gordonsville – Somerset		Dominion (100%)
02000.11	115 kV circuit		2011111011 (10070)
	Upgrading sections of the		
b2686.12	Somerset – Doubleday 115		Dominion (100%)
	kV circuit		

b2686.13	Upgrading sections of the Orange – Somerset 115 kV circuit	Dominion (100%)
b2686.14	Upgrading sections of the Mitchell – Mt. Run 115 kV circuit	Dominion (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

		THIRdu Tto volide Ttoquire	ment responsible edisioner(s)
b2717.1	De-energize Davis – Rosslyn #179 and #180 69 kV lines		Dominion (100%)
b2717.2	Remove splicing and stop joints in manholes		Dominion (100%)
b2717.3	Evacuate and dispose of insulating fluid from various reservoirs and cables		Dominion (100%)
b2717.4	Remove all cable along the approx. 2.5 mile route, swab and cap-off conduits for future use, leave existing communication fiber in place		Dominion (100%)
b2719.1	Expand Perth substation and add a 115 kV four breaker ring		Dominion (100%)
b2719.2	Extend the Hickory Grove DP tap 0.28 miles to Perth and terminate it at Perth		Dominion (100%)
b2719.3	Split Line #31 at Perth and terminate it into the new ring bus with 2 breakers separating each of the line terminals to prevent a breaker failure from taking out both 115 kV lines		Dominion (100%)
b2720	Replace the Loudoun 500 kV 'H1T569' breakers with 50kA breaker		Dominion (100%)
b2729	Optimal Capacitors Configuration: New 175 MVAR capacitor at Brambleton, new 175 MVAR capacitor at Ashburn, new 300 MVAR capacitor at Shelhorm, new 150 MVAR capacitor at Liberty		AEC (1.96%) / BGE (14.37%) / Dominion (35.11%) / DPL (3.76%) / ECP (0.29%) / HTP (0.34%) / JCPL (3.31%) / ME (2.51%) / Neptune (0.63%) / PECO (6.26%) / PEPCO (20.23%) / PPL (3.94%) / PSEG (7.29%)

	Required Tra	ansmission Enhancements Annual	Revenue Requirement	Responsible Customer(s)
				<b>Load-Ratio Share Allocation:</b>
				AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
				( <del>14.18</del> 14. <del>04</del> %) / APS
				( <del>6.05</del> 5.61%) / ATSI
				( <del>7.92</del> 8.10%) / BGE
				(4.234.36%) / ComEd
				( <del>13.20</del> 13.14%) / Dayton
				( <del>2.05</del> 2.15%) / DEOK
				( <del>2.03</del> 2.13%)/ DEOK ( <del>3.18</del> 3.23%)/ DL ( <del>1.68</del> 1.73%)
				, , ,
		D 1 1141 C D		/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	b2744	Rebuild the Carson – Rogers Rd 500 kV circuit		( <del>12.56</del> <u>13.03</u> %) / EKPC
		Ru 300 k v cheun		(1.94 <u>1.77</u> %) / JCPL
				( <del>3.823.84</del> %) / ME ( <del>1.88</del> <u>1.93</u> %)
				/ NEPTUNE* ( <del>0.42<u>0.45</u></del> %) /
				OVEC (0.080.07%) / PECO
				( <del>5.31</del> <u>5.29</u> %) / PENELEC
				( <del>1.90</del> <u>1.89</u> %) / PEPCO
				( <del>3.90</del> 3.82%) / PPL
				( <del>5.00</del> <u>4.72</u> %) / PSEG
				( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
				<b>DFAX Allocation:</b>
				Dominion (100%)
Ī		Rebuild 21.32 miles of		
	b2745	existing line between		Dominion (100%)
	02713	Chesterfield – Lakeside		Zemmen (10070)
-		230 kV Rebuild Line #137 Ridge Rd		
		- Kerr Dam 115 kV, 8.0		
	b2746.1	miles, for 346 MVA summer		Dominion (100%)
		emergency rating		
		Rebuild Line #1009 Ridge Rd		
	b2746.2	- Chase City 115 kV, 9.5		Dominion (100%)
	027 10.2	miles, for 346 MVA summer		2 0 (100/0)
-		emergency rating Install a second 4.8 MVAR		
	b2746.3	capacitor bank on the 13.8 kV		5
		bus of each transformer at		Dominion (100%)
		Ridge Rd		
		Install a Motor Operated		
	1.07.47	Switch and SCADA control		D : : /1000/\
	b2747	between Dominion's Gordonsville 115 kV bus and		Dominion (100%)
		FirstEnergy's 115 kV line		
		indunity of 112 KV IIIIC		

required Tre	distilission Emancements Amida	revenue requirement	responsible Customer(s)
b2757	Install a +/-125 MVAr Statcom at Colington 230 kV		Dominion (100%)
b2758	Rebuild Line #549 Dooms – Valley 500kV		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)  DFAX Allocation:  APS (0.09%) / DL (0.03%) / Dominion (99.88100%)
[ <u> </u>			2 chillion (77.00 <u>100</u> 70)

		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI
		( <del>7.92</del> <u>8.10</u> %) / BGE
		(4.23 <u>4.36</u> %) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> <u>2.15</u> %) / DEOK
		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %)
	Rebuild Line #550 Mt. Storm  – Valley 500kV	/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
b2759		( <del>1.94</del> <u>1.77</u> %) / JCPL
		(3.823.84%) / ME $(1.881.93%)$
		/ NEPTUNE* ( <del>0.42<u>0.45</u></del> %) /
		OVEC ( <del>0.08</del> <u>0.07</u> %) / PECO
		( <del>5.31</del> 5.29%) / PENELEC
		( <del>1.90</del> 1.89%) / PEPCO
		( <del>3.90</del> 3.82%)/PPL
		( <del>5.004.72</del> %) / PSEG
		( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		APS (87.50%) / ATSI (0.37%)
		/ DL (0.19%) / Dominion
		(1.04%) / EKPC (10.90%)

Required 113		Revenue Requirement	Responsible Customer(s)
b2800	The 7 mile section from Dozier to Thompsons Corner of line #120 will be rebuilt to current standards using 768.2 ACSS conductor with a summer emergency rating of 346 MVA at 115 kV. Line is proposed to be rebuilt on single circuit steel monopole structure		Dominion (100%)
b2801	Lines #76 and #79 will be rebuilt to current standard using 768.2 ACSS conductor with a summer emergency rating of 346 MVA at 115 kV. Proposed structure for rebuild is double circuit steel monopole structure		Dominion (100%)
b2802	Rebuild Line #171 from Chase City – Boydton Plank Road tap by removing end- of-life facilities and installing 9.4 miles of new conductor. The conductor used will be at current standards with a summer emergency rating of 393 MVA at 115kV		Dominion (100%)
b2815	Build a new Pinewood 115kV switching station at the tap serving North Doswell DP with a 115kV four breaker ring bus		Dominion (100%)
b2842	Update the nameplate for Mount Storm 500 kV "57272" to be 50kA breaker		Dominion (100%)
b2843	Replace the Mount Storm 500 kV "G2TY" with 50kA breaker		Dominion (100%)
b2844	Replace the Mount Storm 500 kV "G2TZ" with 50kA breaker		Dominion (100%)

Required 11a		Revenue Requirement	Responsible Customer(s)
b2845	Update the nameplate for Mount Storm 500 kV "G3TSX1" to be 50kA breaker		Dominion (100%)
b2846	Update the nameplate for Mount Storm 500 kV "SX172" to be 50kA breaker		Dominion (100%)
b2847	Update the nameplate for Mount Storm 500 kV "Y72" to be 50kA breaker		Dominion (100%)
b2848	Replace the Mount Storm 500 kV "Z72" with 50kA breaker		Dominion (100%)
b2871	Rebuild 230 kV line #247 from Swamp to Suffolk (31 miles) to current standards with a summer emergency rating of 1047 MVA at 230 kV		Dominion (100%)
b2876	Rebuild line #101 from Mackeys – Creswell 115 kV, 14 miles, with double circuit structures. Install one circuit with provisions for a second circuit. The conductor used will be at current standards with a summer emergency rating of 262 MVA at 115 kV		Dominion (100%)
b2877	Rebuild line #112 from Fudge Hollow – Lowmoor 138 kV (5.16 miles) to current standards with a summer emergency rating of 314 MVA at 138 kV		Dominion (100%)
b2899	Rebuild 230 kV line #231 to current standard with a summer emergency rating of 1046 MVA. Proposed conductor is 2-636 ACSR		Dominion (100%)
b2900	Build a new 230/115 kV switching station connecting to 230 kV network line #2014 (Earleys – Everetts). Provide a 115 kV source from the new station to serve Windsor DP		Dominion (100%)

Required 118		Revenue Requirement	Responsible Customer(s)
b2922	Rebuild 8 of 11 miles of 230 kV lines #211 and #228 to current standard with a summer emergency rating of 1046 MVA for rebuilt section. Proposed conductor is 2-636 ACSR		Dominion (100%)
b2928	Rebuild four structures of 500 kV line #567 from Chickahominy to Surry using galvanized steel and replace the river crossing conductor with 3-1534 ACSR. This will increase the line #567 line rating from 1954 MVA to 2600 MVA		Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP  (14.1814.04%) / APS  (6.055.61%) / ATSI  (7.928.10%) / BGE  (4.234.36%) / ComEd  (13.2013.14%) / Dayton  (2.052.15%) / DEOK  (3.183.23%) / DL (1.681.73%)  / DPL (2.582.65%) / Dominion  (12.5613.03%) / EKPC  (1.941.77%) / JCPL  (3.823.84%) / ME (1.881.93%)  / NEPTUNE* (0.420.45%) /  OVEC (0.080.07%) / PECO  (5.315.29%) / PENELEC  (1.901.89%) / PEPCO  (3.903.82%) / PPL  (5.004.72%) / PSEG  (6.156.21%) / RE (0.250.26%)  DFAX Allocation:  Dominion (100%)
b2929	Rebuild 230 kV line #2144 from Winfall to Swamp (4.3 miles) to current standards with a standard conductor (bundled 636 ACSR) having a summer emergency rating of 1047 MVA at 230 kV		Dominion (100%)
b2960	Replace fixed series capacitors on 500 kV Line #547 at Lexington and on 500 kV Line #548 at Valley		See sub-IDs for cost allocations

rtequirea ire	distrission Emancements Amida	Revenue Requirement	Responsible Customer(s)
			<b>Load-Ratio Share Allocation:</b>
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
			( <del>14.18<u>14.04</u>%) / APS</del>
			( <del>6.05</del> <u>5.61</u> %) / ATSI
			( <del>7.92</del> 8.10%) / BGE
			(4.23 <u>4.36</u> %) / ComEd
			( <del>13.20</del> <u>13.14</u> %) / Dayton
			( <del>2.05</del> 2.15%) / DEOK
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %)
			/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
	D1		( <del>12.56</del> <u>13.03</u> %) / EKPC
b2960.1	Replace fixed series capacitors on 500 kV Line	(1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC	
02900.1	#547 at Lexington		
			( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> <u>3.8′</u>	( <del>3.90</del> <u>3.82</u> %) / PPL
			( <del>5.00</del> <u>4.72</u> %) / PSEG
			( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			DEOK ( <del>6.04</del> <u>5.63</u> %) /
			Dominion ( <del>91.37</del> <u>91.06</u> %) /
			EKPC ( <del>2.59</del> <u>3.31</u> %)

Required Tra	ansmission Enhancements Annual	Revenue Requirement	Responsible Customer(s)
			<b>Load-Ratio Share Allocation:</b>
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18</del> 14.04%) / APS
			,
			,
			Load-Ratio Share Allocation:
			, , ,
			`
	Replace fixed series		
b2960.2	capacitors on 500 kV Line		
	#548 at Valley		· · · · · · · · · · · · · · · · · · ·
			`
			·
			( <del>3.90</del> 3.82%) / PPL
		( <del>5.00</del> <u>4.72</u> %) / PSEG	
			, , ,
		<b>DFAX Allocation:</b> DEOK (29.7917.57%) / Dominion (60.3274.24%) /	<b>DFAX Allocation:</b>
			Dominion ( <del>60.32</del> <u>74.24</u> %) /
			EKPC ( <del>9.89</del> 8.19%)
	Rebuild approximately 3		
b2961	miles of Line #205 & Line		Dominion (100%)
	#2003 from Chesterfield to		_ *************************************
	Locks & Poe respectively Split Line #227 (Brambleton		
1.00.60	- Beaumeade 230 kV) and		D (1000)
b2962	terminate into existing		Dominion (100%)
	Belmont substation		
	Replace the Beaumeade 230		
b2962.1	kV breaker "274T2081" with		Dominion (100%)
	63kA breaker Replace the NIVO 230 kV		
b2962.2	breaker "2116T2130" with		Dominion (100%)
02702.2	63kA breaker		Dominion (10070)
	Reconductor the Woodbridge		
	to Occoquan 230 kV line		
1.00.50	segment of Line #2001 with		D
b2963	1047 MVA conductor and		Dominion (100%)
	replace line terminal equipment at Possum Point,		
	Woodbridge, and Occoquan		
L	,, Journage, and Occoquan		

Required 11	ransmission Enhancements Ann	iual Revenue Requireme	1
			Load-Ratio Share
.]			Allocation:
			AEC ( <del>1.72</del> 1.71%) / AEP
			( <del>14.18<u>14.04</u>%) / APS</del>
			( <del>6.05</del> <u>5.61</u> %) / ATSI
			( <del>7.92</del> 8.10%) / BGE
			(4.234.36%) / ComEd
			( <del>13.20</del> 13.14%) / Dayton
			( <del>2.05</del> 2.15%)/DEOK
			( <del>3.18</del> 3.23%) / DL ( <del>1.68</del> 1.73%)
	Install 2-125 MVAR		/ DPL ( <del>2.58</del> 2.65%) /
	STATCOMs at Rawlings		Dominion ( <del>12.56</del> 13.03%) /
b2978	and 1-125 MVAR		EKPC ( <del>1.94</del> <u>1.77</u> %) / JCPL
	STATCOM at Clover 500		( <del>3.82</del> 3.84%) / ME
	kV substations		( <del>1.88</del> 1.93%) / NEPTUNE*
			( <del>0.42</del> 0.45%) / OVEC
			( <del>0.08</del> 0.07%) / PECO
			`
		( <del>1.90</del> 1.89%) / PEPCO ( <del>3.90</del> 3.82%) / PPL ( <del>5.00</del> 4.72%) / PSEG	( <del>5.31</del> 5.29%) / PENELEC
			`
IJ			( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
			DFAX Allocation:
			Dominion (100%)
	Rebuild 115 kV Line #43		
	between Staunton and		
b2980	Harrisonburg (22.8 miles)		Dominion (100%)
02700	to current standards with a		Bollimon (10070)
	summer emergency rating		
	of 261 MVA at 115 kV		
	Rebuild 115 kV Line #29		
	segment between		
	Fredericksburg and Aquia		
	Harbor to current 230 kV		
b2981	standards (operating at 115		
	kV) utilizing steel H-frame		Dominion (100%)
	structures with 2-636		,
	ACSR to provide a normal		
	continuous summer rating		
	of 524 MVA at 115 kV		
	(1047 MVA at 230 kV)		
	(107/141 V A at 230 K V)		

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 11	ansmission Enhancements Annual	Revenue Requirement	Responsible Customer(s)
b2989	Install a second 230/115 kV Transformer (224 MVA) approximately 1 mile north of Bremo and tie 230 kV Line #2028 (Bremo – Charlottesville) and 115 kV Line #91 (Bremo - Sherwood) together. A three breaker 230 kV ring bus will split Line #2028 into two lines and Line #91 will also be split into two lines with a new three breaker 115 kV ring bus. Install a temporary 230/115 kV transformer at Bremo substation for the interim until the new substation is complete		Dominion (100%)
b2990	Chesterfield to Basin 230 kV line – Replace 0.14 miles of 1109 ACAR with a conductor which will increase the line rating to approximately 706 MVA		Dominion (100%)
b2991	Chaparral to Locks 230 kV line – Replace breaker lead		Dominion (100%)
b2994	Acquire land and build a new switching station (Skippers) at the tap serving Brink DP with a 115 kV four breaker ring to split Line #130 and terminate the end points		Dominion (100%)
b3018	Rebuild Line #49 between New Road and Middleburg substations with single circuit steel structures to current 115 kV standards with a minimum summer emergency rating of 261 MVA		Dominion (100%)

Required 118	distrission Emancements Amua	i Kevenue Kequirement	responsible edistriner(s)	
			<b>Load-Ratio Share Allocation:</b>	
			AEC ( <del>1.72</del> <u>1.71</u> %) / AEP	
			( <del>14.18</del> <u>14.04</u> %) / APS	
			( <del>6.05</del> <u>5.61</u> %) / ATSI	
			( <del>7.92</del> 8.10%) / BGE	
			(4.23 <u>4.36</u> %) / ComEd	
			AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (1.981.73%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%) DFAX Allocation:	
			( <del>2.05</del> 2.15%) / DEOK	
			( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %)	
			/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion	
	Rebuild 500 kV Line #552		( <del>12.56</del> <u>13.03</u> %) / EKPC	
b3019	Bristers to Chancellor – 21.6		( <del>1.94</del> 1.77%) / JCPL	
	miles long		( <del>3.82</del> <u>3.84</u> %) / ME ( <del>1.88</del> <u>1.93</u> %)	
			/ NEPTUNE* ( <del>0.42</del> <u>0.45</u> %) /	
		( <del>5.31</del> <u>5.29</u> %) / PENELEC ( <del>1.90</del> <u>1.89</u> %) / PEPCO ( <del>3.90</del> <u>3.82</u> %) / PPL	OVEC ( <del>0.08</del> <u>0.07</u> %) / PECO	
			`	
			(5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)	
			DFAX Allocation:	
			Dominion (89.20%) / PEPCO	
			(10.80%)	
1.2010	Update the nameplate for			
b3019.1	Morrisville 500 kV breaker "H1T594" to be 50kA		Dominion (100%)	
	Update the nameplate for			
b3019.2	Morrisville 500 kV breaker		Dominion (100%)	
55,017.2	"H1T545" to be 50kA			

110401100	Talishinssion Emancements Annua	a Revenue requirement Responsible Customer(s)
.		Load-Ratio Share Allocation:
		AEC ( <del>1.72</del> <u>1.71</u> %) / AEP
		( <del>14.18</del> <u>14.04</u> %) / APS
		( <del>6.05</del> <u>5.61</u> %) / ATSI
		( <del>7.92</del> 8.10%) / BGE
		(4.234.36%) / ComEd
		( <del>13.20</del> <u>13.14</u> %) / Dayton
		( <del>2.05</del> <u>2.15</u> %) / DEOK
		( <del>3.18</del> <u>3.23</u> %) / DL ( <del>1.68</del> <u>1.73</u> %)
		/ DPL ( <del>2.58</del> <u>2.65</u> %) / Dominion
		( <del>12.56</del> <u>13.03</u> %) / EKPC
	Rebuild 500 kV Line #574	( <del>1.94</del> <u>1.77</u> %) / JCPL
b3020	Ladysmith to Elmont – 26.2	( <del>3.82</del> 3.84%) / ME ( <del>1.88</del> 1.93%)
	miles long	/ NEPTUNE* ( <del>0.42</del> <u>0.45</u> %) /
		OVEC ( <del>0.08</del> <u>0.07</u> %) / PECO
		( <del>5.31</del> <u>5.29</u> %) / PENELEC
		( <del>1.90</del> <u>1.89</u> %) / PEPCO
		( <del>3.90</del> 3.82%) / PPL
		( <del>5.00</del> 4.72%) / PSEG
		( <del>6.15</del> <u>6.21</u> %) / RE ( <del>0.25</del> <u>0.26</u> %)
		DFAX Allocation:
		APS (16.36%) / DEOK
		(11.61%) / Dominion (51.27%)
		/ EKPC (5.30%) / PEPCO
		(15.46%)

b3021	Rebuild 500 kV Line #581 Ladysmith to Chancellor – 15.2 miles long	Load-Ratio Share Allocation:  AEC (1.721.71%) / AEP (14.1814.04%) / APS (6.055.61%) / ATSI (7.928.10%) / BGE (4.234.36%) / ComEd (13.2013.14%) / Dayton (2.052.15%) / DEOK (3.183.23%) / DL (1.681.73%) / DPL (2.582.65%) / Dominion (12.5613.03%) / EKPC (1.941.77%) / JCPL (3.823.84%) / ME (1.881.93%) / NEPTUNE* (0.420.45%) / OVEC (0.080.07%) / PECO (5.315.29%) / PENELEC (1.901.89%) / PEPCO (3.903.82%) / PPL (5.004.72%) / PSEG (6.156.21%) / RE (0.250.26%)  DFAX Allocation: Dominion (100%)
b3026	Reconductor Line #274 (Pleasant View – Ashburn – Beaumeade 230 kV) with a minimum rating of 1200 MVA. Also upgrade terminal equipment	Dominion (100%)

Required 11a	dishlission Enhancements Annual	Revenue Requirement	Responsible Customer(s)
b3027.1	Add a 2nd 500/230 kV 840 MVA transformer at Dominion's Ladysmith substation		Dominion (100%)
b3027.2	Reconductor 230 kV Line #2089 between Ladysmith and Ladysmith CT substations to increase the line rating from 1047 MVA to 1225 MVA		Dominion (100%)
b3027.3	Replace the Ladysmith 500 kV breaker "H1T581" with 50kA breaker		Dominion (100%)
b3027.4	Update the nameplate for Ladysmith 500 kV breaker "H1T575" to be 50kA breaker		Dominion (100%)
b3027.5	Update the nameplate for Ladysmith 500 kV breaker "568T574" (will be renumbered as "H2T568") to be 50kA breaker		Dominion (100%)
b3055	Install spare 230/69 kV transformer at Davis substation		Dominion (100%)
b3056	Partial rebuild 230 kV Line #2113 Waller to Lightfoot		Dominion (100%)
b3057	Rebuild 230 kV Lines #2154 and #19 Waller to Skiffes Creek		Dominion (100%)
b3058	Partial rebuild of 230 kV Lines #265, #200 and #2051		Dominion (100%)
b3059	Rebuild 230 kV Line #2173 Loudoun to Elklick		Dominion (100%)

Required 11		Revenue Requirement	Responsible Customer(s)
b3060	Rebuild 4.6 mile Elklick – Bull Run 230 kV Line #295 and the portion (3.85 miles) of the Clifton – Walney 230 kV Line #265 which shares structures with Line #295		Dominion (100%)
b3088	Rebuild 4.75 mile section of Line #26 between Lexington and Rockbridge with a minimum summer emergency rating of 261 MVA		Dominion (100%)
b3089	Rebuild 230 kV Line #224 between Lanexa and Northern Neck utilizing double circuit structures to current 230 kV standards. Only one circuit is to be installed on the structures with this project with a minimum summer emergency rating of 1047 MVA		Dominion (100%)
b3090	Convert the overhead portion (approx. 1500 feet) of 230 kV Lines #248 & #2023 to underground and convert Glebe substation to gas insulated substation		Dominion (100%)
b3096	Rebuild 230 kV line No.2063 (Clifton – Ox) and part of 230 kV line No.2164 (Clifton – Keene Mill) with double circuit steel structures using double circuit conductor at current 230 kV northern Virginia standards with a minimum rating of 1200 MVA		Dominion (100%)
b3097	Rebuild 4 miles of 115 kV Line #86 between Chesterfield and Centralia to current standards with a minimum summer emergency rating of 393 MVA		Dominion (100%)
b3098	Rebuild 9.8 miles of 115 kV Line #141 between Balcony Falls and Skimmer and 3.8 miles of 115 kV Line #28 between Balcony Falls and Cushaw to current standards with a minimum rating of 261 MVA		Dominion (100%)

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

required 11	ansmission Emancements Amida	Revenue Requirement	Responsible Customer(s)
b3098.1	Rebuild Balcony Falls 115 kV substation		Dominion (100%)
b3110.1	Rebuild Line #2008 between Loudoun to Dulles Junction using single circuit conductor at current 230 kV northern Virginia standards with minimum summer ratings of 1200 MVA. Cut and loop Line #265 (Clifton – Sully) into Bull Run substation. Add three (3) 230 kV breakers at Bull Run to accommodate the new line and upgrade the substation		Dominion (100%)
b3110.2	Replace the Bull Run 230 kV breakers "200T244" and "200T295" with 50 kA breakers		Dominion (100%)
b3113	Rebuild approximately 1 mile of 115 kV Lines #72 and #53 to current standards with a minimum summer emergency rating of 393 MVA. The resulting summer emergency rating of Line #72 segment from Brown Boveri to Bellwood is 180 MVA. There is no change to Line #53 ratings		Dominion (100%)
b3114	Rebuild the 18.6 mile section of 115 kV Line #81 which includes 1.7 miles of double circuit Line #81 and 230 kV Line #2056. This segment of Line #81 will be rebuilt to current standards with a minimum rating of 261 MVA. Line #2056 rating will not change		Dominion (100%)
b3121	Rebuild Clubhouse – Lakeview 230 kV Line #254 with single-circuit wood pole equivalent structures at the current 230 kV standard with a minimum rating of 1047 MVA		Dominion (100%)

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

Required 118		Revenue Requirement	Responsible Customer(s)
b3122	Rebuild Hathaway – Rocky Mount (Duke Energy Progress) 230 kV Line #2181 and Line #2058 with double circuit steel structures using double circuit conductor at current 230 kV standards with a minimum rating of 1047 MVA		Dominion (100%)
b3161.1	Split Chesterfield-Plaza 115 kV Line No. 72 by rebuilding the Brown Boveri tap line as double circuit loop in-and-out of the Brown Boveri Breaker station		Dominion (100%)
b3161.2	Install a 115 kV breaker at the Brown Boveri Breaker station. Site expansion is required to accommodate the new layout		Dominion (100%)
b3162	Acquire land and build a new 230 kV switching station (Stevensburg) with a 224 MVA, 230/115 kV transformer. Gordonsville-Remington 230 kV Line No. 2199 will be cut and connected to the new station. Remington-Mt. Run 115 kV Line No.70 and Mt. Run-Oak Green 115 kV Line No. 2 will also be cut and connected to the new station		Dominion (100%)
b3211	Rebuild the 1.3 mile section of 500 kV Line No. 569 (Loudoun – Morrisville) with single-circuit 500 kV structures at the current 500 kV standard. This will increase the rating of the line to 3424 MVA		Dominion (100%)
b3213	Install 2nd Chickahominy 500/230 kV transformer		Dominion (100%)

#### SCHEDULE 12 – APPENDIX A

## (23) American Transmission Systems, Inc.

Required 7	Fransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2019.2	Terminate Burger – Longview 138 kV, Burger – Brookside 138 kV, Burger – Cloverdale 138 kV #1, and Burger – Harmon 138 kV #2 into Holloway substation; Loop Burger – Harmon #1 138 kV and Burger – Knox 138 kV into Holloway substation		ATSI (100%)
b2019.3	Reconfigure Burger 138 kV substation to accommodate two 138 kV line exits and generation facilities		ATSI (100%)
b2019.4	Remove both Burger 138 kV substations (East and West 138 kV buses) and all 138 kV lines on the property		ATSI (100%)
b2019.5	Terminate and de- energize the 138 kV lines on the last structure before the Burger Plant property		ATSI (100%)
b2122.1	Reconductor the ATSI portion of the Howard – Brookside 138 kV line		ATSI (100%)
b2122.2	Upgrade terminal equipment at Brookside on the Howard – Brookside 138 kV line to achieve ratings of 252/291 (SN/SE)		ATSI (100%)
b2188	Revise the reclosing for the Bluebell 138 kV breaker '301-B-94'		ATSI (100%)
b2192	Replace the Longview 138 kV breaker '651-B-32'		ATSI (100%)
b2193	Replace the Lowellville 138 kV breaker '1-10-B 4'		ATSI (100%)

Required '	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2195	Replace the Roberts 138 kV breaker '601-B-60'		ATSI (100%)
b2196	Replace the Sammis 138 kV breaker '780-B-76'		ATSI (100%)
b2262	New Castle Generating Station – Relocate 138kV, 69kV, and 23kV controls from the generating station building to new control building		ATSI (100%)
b2263	Niles Generation Station – Relocate 138kV and 23kV controls from the generation station building to new control building		ATSI (100%)
b2265	Ashtabula Generating Station – Relocate 138kV controls from the generating station building to new control building		ATSI (100%)
b2284	Increase the design operating temperature on the Cloverdale – Barberton 138kV line		ATSI (100%)
b2285	Increase the design operating temperature on the Cloverdale – Star 138kV line		ATSI (100%)
b2301	Reconductor 0.7 miles of 605 ACSR conductor on the Beaver Black River 138kV line		ATSI (100%)
b2301.1	Wave trap and line drop replacement at Beaver (312/380 MVA SN/SE)		ATSI (100%)
b2349	Replace the East Springfield 138kV breaker 211-B-63 with 40kA		ATSI (100%)
b2367	Replace the East Akron 138kV breaker 36-B-46 with 40kA		ATSI (100%)

required	Transmission Emancements	Annual Revenue Requirement	Responsible Customer(s)
b2413	Replace a relay at McDowell 138 kV substation		ATSI (100%)
b2434	Build a new London – Tangy 138 kV line		ATSI (100%)
b2435	Build a new East Springfield – London #2 138 kV line		ATSI-Dayton (100%)
b2459	Install +260/-150 MVAR SVC at Lake Shore		ATSI (100%)
b2492	Replace the Beaver 138 kV breaker '426-B-2' with 63kA breaker		ATSI (100%)
b2493	Replace the Hoytdale 138kV breaker '83-B-30' with 63kA breaker		ATSI (100%)
b2557	At Avon substation, replace the existing 345/138 kV 448 MVA #92 transformer with a 560 MVA unit		ATSI (100%)
b2558	Close normally open switch A 13404 to create a Richland J Bus – Richland K Bus 138 kV line		ATSI (100%)
b2559	Reconductor the Black River – Lorain 138 kV line and upgrade Black River and Lorain substation terminal end equipment		ATSI (100%)
b2560	Construct a second 138 kV line between West Fremont and Hayes substation on open tower position of the West Fremont –Groton –Hayes 138 kV line		ATSI (100%)
b2616	Addition of 4th 345/138 kV transformer at Harding		ATSI (100%)

Required	Fransmission Enhancements .	Annual Revenue Requirement	Responsible Customer(s)
b2673	Rebuild the existing double circuit tower line section from Beaver substation to Brownhelm Jct. approx.  2.8 miles		ATSI (100%)
b2674	Rebuild the 6.6 miles of Evergreen to Ivanhoe 138 kV circuit with 477 ACSS conductor		ATSI (100%)
b2675	Install 26.4 MVAR capacitor and associated terminal equipment at Lincoln Park 138 kV substation		ATSI (100%)
b2725	Build new 345/138 kV Lake Avenue substation w/breaker and a half high side (2 strings), 2-345/138 kV transformers and breaker and a half (2 strings) low side (138 kV). Substation will tie Avon – Beaver 345 kV #1/#2 and Black River – Johnson #1/#2 lines		ATSI (100%)
b2725.1	Replace the Murray 138 kV breaker '453-B-4' with 40kA breaker		ATSI (100%)
b2742	Replace the Hoytdale 138 kV '83-B-26' and '83-B- 30' breakers with 63kA breakers		ATSI (100%)
b2753.4	Double capacity for 6 wire "Burger-Cloverdale No. 2" 138 kV line and connect at Holloway and "Point A"		ATSI (100%)
b2753.5	Double capacity for 6 wire "Burger-Longview" 138 kV line and connect at Holloway and "Point A"		ATSI (100%)
b2778	Add 2nd 345/138 kV transformer at Chamberlin substation		ATSI (100%)
b2780	Replace Bruce Mansfield 345 kV breaker 'B57' with an 80 kA breaker, and associated gang-operated disconnect switches D56 and D58		ATSI (100%)

rtequirea	Tansinission Linancements A	iniuai Revenue Requirement	responsible Customer(s)
b2869	Replace the Crossland 138 kV breaker "B-16" with a 40kA breaker		ATSI (100%)
b2875	Relocate the Richland to Ridgeville 138 kV line from Richland J bus to K, extend the K bus and install a new breaker		ATSI (100%)
b2896	Rebuild/Reconductor the Black River – Lorain 138 kV circuit		ATSI (100%)
b2897	Reconductor the Avon – Lorain 138 kV section and upgrade line drop at Avon		ATSI (100%)
b2898	Reconductor the Beaver – Black River 138 kV with 954Kcmil ACSS conductor and upgrade terminal equipment on both stations		ATSI (100%)
b2942.1	Install a 100 MVAR 345 kV shunt reactor at Hayes substation		ATSI (100%)
b2942.2	Install a 200 MVAR 345 kV shunt reactor at Bayshore substation		ATSI (100%)
b2972	Reconductor limiting span of Lallendorf – Monroe 345 kV		MISO (11.00%) / AEP (5.38%) / APS (4.27%) / ATSI (66.48%) / Dayton (2.71%) / Dominion (5.31%) / DL (4.85%)
b3031	Transfer load off of the Leroy Center - Mayfield Q2 138 kV line by reconfiguring the Pawnee substation primary source, via the existing switches, from the Leroy Center - Mayfield Q2 138 kV line to the Leroy Center - Mayfield Q1 138 kV line		ATSI (100%)

Required	Transmission Enhancements	Annual Revenue Requiremen	t Responsible Customer(s)
b3032	Greenfield - NASA 138 kV terminal upgrades: NASA substation, Greenfield exit: Revise CT tap on breaker B22 and adjust line relay settings; Greenfield substation, NASA exit: Revise CT tap on breaker B1 and adjust line relay settings; replace 336.4 ACSR line drop with 1033.5 AL		ATSI (100%)
b3033	Ottawa – Lakeview 138 kV reconductor and substation upgrades		ATSI (100%)
b3034	Lakeview – Greenfield 138 kV reconductor and substation upgrades		ATSI (100%).
b3066	Reconductor the Cranberry  – Jackson 138 kV line (2.1 miles), reconductor 138 kV bus at Cranberry bus and replace 138 kV line switches at Jackson bus		ATSI (100%)
b3067	Reconductor the Jackson – Maple 138 kV line (4.7 miles), replace line switches at Jackson 138 kV and replace the line traps and relays at Maple 138 kV bus		ATSI (100%)
b3080	Reconductor the 138 kV bus at Seneca		ATSI (100%)
b3081	Replace the 138 kV breaker and reconductor the 138 kV bus at Krendale		ATSI (100%)
b3124	Separate metering, station power, and communication at Bruce Mansfield 345 kV station		ATSI (100%)

		 (°)
b3127	At Bay Shore 138 kV station: Install new switchyard power supply to separate from existing generating station power service, separate all communications circuits, and construct a new station access road	ATSI (100%)
b3152	Reconductor the 8.4 mile section of the Leroy Center — Mayfield Q1 line between Leroy Center and Pawnee Tap to achieve a rating of at least 160 MVA / 192 MVA (SN/SE)	ATSI (100%)

#### SCHEDULE 12 – APPENDIX A

## (24) Duke Energy Ohio and Duke Energy Kentucky

Required T	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Revising the reclosing of	_	_
b2278	Charles 138kV breaker '919'		DEOK (100%)
	to 15 sec		
b2451	Replace the Charles 138 kV		DEOK (100%)
b2451	breaker '919' with 63 kA		DEOK (100%)
	Add two breakers at Miami		
	Fort 138 kV; Interim		
	solution to violation driven		
b2564	by Beckjord GTs		DEOK (100%)
	deactivations is to lower		
	generation at Miami Fort to		
	120 MW		
	Convert Miami Fort 345 kV		
	substation to a ring bus		
b2634	terminating Feeder 4504,		DEOK (100%)
	TB 9 and TB 10 in separate		
	ring positions		
b2828	Install 5% reactors at Miami		DEOK (100%)
02828	Fort 138 kV to limit current		DEOK (100%)
	Reconductor feeder from		
b2829	Port Union to East		DEOK (100%)
02029	Provident 138 kV line for		DEOK (100%)
	300MVA		
	Expand Garver 345 kV		
	substation to include 138		
	kV. Install 1-345 kV		
	breaker, 1-345/138 kV 400		
b2830	MVA transformer, 6-138		DEOK (100%)
	kV Breakers and bus work.		
	Connect local 138 kV		
	circuits from Todhunter,		
	Rockies Express, and Union		
	Upgrade the Tanner Creek -		DFAX Allocation:
b2831.2	Miami Fort 345 kV circuit		Dayton ( <del>34.34</del> <u>61.71</u> %) /
	(DEOK portion)		DEOK ( <del>56.45</del> <u>37.68</u> %) / <del>EKPC</del>
	-		<u>OVEC (9.210.61</u> %)
	Replace Todhunter 138 kV		
b2894	breakers '931', '919', and		DEOK (100%)
	'913' with 80 kA breakers		

## **Duke Energy Ohio and Duke Energy Kentucky (cont.)**

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Replace Dicks Creek 138		
b2895	kV breaker '963' with 63		DEOK (100%)
	kA breaker		
	Reconductor the Port Union		
	– Mulhauser 138 kV line		
b2901	with 954 ASCR bringing the		DEOK (100%)
	summer ratings to		` ,
	A/B/C=300/300/300 MVA		
b2977	Portion of 2017_1-6A		DEOK (100%)
	Install a new 345 kV		
	breaker "1422" so Pierce		
b2977.1	345/138 kV transformer #18		DEOK (100%)
02977.1	is now fed in a double		DEOR (100%)
	breaker, double bus		
	configuration		
	Remove X-533 No. 2 to the		
b2977.2	first tower outside the		DEOK (100%)
02711.2	station. Install a new first		DEOR (100%)
	tower for X-533 No. 2		
	Install a new 345 kV		
	breaker B and move the		
	Buffington – Pierce 345 kV		
b2977.3	feeder to the B-C junction.		DEOK (100%)
02911.3	Install a new tower at the		DEOR (100%)
	first tower outside the		
	station for Buffington –		
	Pierce 345 kV line		
	Remove breaker A and		
b2977.4	move the Pierce 345/138 kV		DEOK (100%)
02711.4	transformer #17 feed to the		DLOK (100%)
	C-D junction		
	Replace breaker 822 at		
	Beckjord 138 kV substation		
b2977.5	to increase the rating from		DEOK (100%)
	Pierce to Beckjord 138 kV		
	to 603MVA		
b3048	Replace 138 kV breakers		
	937, 941 and 945 at		DEOK (100%)
	Todhunter station		
b3050	Install redundant relay to		DEOK (100%)
	Port Union 138 kV Bus #2		DEGIT (10070)

# **Attachment B**

Schedule 12 – Appendices of the PJM Open Access Transmission Tariff

(Clean Format)

#### **SCHEDULE 12 – APPENDIX**

## (1) Atlantic City Electric Company

required 1		iuai Revenue Requirement	Responsible Cusiomer(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)

	Install 15 MVAR capacitor at	
b0281.2	Shipbottom 69 kV substation	AEC (100%)
b0281.3	Install 8 MVAR capacitors on	AEC (1000/)
00281.3	the AE distribution system	AEC (100%)
b0142	Reconductor Landis –	AEC (100%)
00142	Minotola 138 kV	ALC (100%)
b0143	Reconductor Beckett –	AEC (100%)
	Paulsboro 69 kV	· · · · ·
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.	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%)
		AEC (80.73%) / JCPL (19.27%)
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%)††

<sup>\*</sup> 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.

<sup>\*\*</sup>East Coast Power, L.L.C.

<sup>†</sup>Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

<sup>††</sup>Cost allocations associated with below 500 kV elements of the project

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

Required T	ransmission Enhancements	Annual Revenue Requireme	ent 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) Install 10 MVAR capacitor b1244 at Peermont 69 kV AEC (100%) substation Rebuild the Newport-South b1245 AEC (100%) Millville 69 kV line Reconductor the Monroe – b1250 AEC (100%) Glassboro 69 kV Upgrade substation b1250.1 AEC (100%) equipment at Glassboro Sherman: Upgrade 138/69 b1280 AEC (100%) kV transformers Replace Lewis 138 kV b1396 AEC (100%) breaker 'L' JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / Reconductor the existing b1398.5 Mickleton – Goucestr 230 PECO (51.08%) / PEPCO kV circuit (AE portion) (0.57%) / ECP\*\* (0.85%) / PSEG (31.46%) / RE (1.25%) Reconductor Sherman Av b1598 AEC (100%) Carl's Corner 69kV circuit Replace terminal equipments at Central b1599 AEC (100%) North 69 kV substation AEC (88.83%) / JCPL (4.74%) / HTP (0.20%) / ECP\*\* Upgrade the Mill T2 b1600 138/69 kV transformer (0.22%) / PSEG (5.78%) / RE (0.23%)Re-build 5.3 miles of the b2157 Corson - Tuckahoe 69 kV AEC (100%) circuit

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

#### SCHEDULE 12 – APPENDIX

#### (2) Baltimore Gas and Electric Company

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Add (2) 230 kV Breakers at High Ridge and install b0152 BGE (100%) two Northwest 230 kV 120 MVAR capacitors Install a 4<sup>th</sup> Waugh Chapel 500/230kV transformer, terminate the transformer BGE (85.56%) / ME (0.83%) / b0244 in a new 500 kV bay and PEPCO (13.61%) operate the existing inservice spare transformer on standby As specified in Attachment Replace both Conastone BGE (75.85%) / Dominion H-2A. Attachment 7, the b0298 500/230 kV transformers (11.54%) / ME (4.73%) / PEPCO Transmission Enhancement with larger transformers (7.88%)Charge Worksheet Replace Conastone 230 b0298.1 BGE (100%) kV breaker 500-3/2323 Add a fourth 230/115 kV transformer, two 230 kV b0474 circuit breakers and a 115 BGE (100%) kV breaker at Waugh Chapel Create two 230 kV ring buses at North West, add two 230/115 kV b0475 BGE (100%) transformers at North West and create a new 115 kV station at North West Rebuild High Ridge 230 kV substation to Breaker b0476 BGE (100%) and Half configuration Replace the Waugh BGE (90.56%) / ME (1.51%) / Chapel 500/230 kV PECO (.92%) / PEPCO (4.01%) / b0477 transformer #1 with three PPL (3.00%) single phase transformers

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

1104011100		Tumaar Revenue Requiremen	1
b0497	Install a second Conastone – Graceton 230 kV circuit		AEC (9.00%) / DPL (16.85%) / JCPL (9.64%) / ME (1.48%) / Neptune* (0.95%) / PECO (30.79%) / PPL (16.41%) / ECP** (0.29%) / PSEG (14.07%) / RE (0.52%)
b0497.1	Replace Conastone 230 kV breaker #4		BGE (100%)
b0497.2	Replace Conastone 230 kV breaker #7		BGE (100%)
b0500.2	Replace wavetrap and raise operating temperature on Conastone – Otter Creek 230 kV line to 165 deg		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%)
b0512.33	MAPP Project Install new Hallowing Point – Calvert Cliffs 500 kV circuit and associated substation work at Calvert Cliffs substation		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Elmancements	Annual Revenue Requireme	in Responsible Customer(s)
b0512.43	MAPP Project Install new Hallowing Point – Calvert Cliffs 500 kV circuit and associated substation work at	Annual Revenue Requireme	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
	Calvert Cliffs substation		(0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)
b0729	Rebuild both Harford – Perryman 110615-A and 110616-A 115 kV circuits		BGE (100%)
b0749	Replace 230 kV breaker and associated CT's at Riverside 230 kV on 2345 line; replace all dead-end structures at Brandon Shores, Hawkins Point, Sollers Point and Riverside; Install a second conductor per phase on the spans entering each station		BGE (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Require	i Transmission Emiancements	Annual Revenue Requirement	Responsible Customer(s)
b0795	Install a 115 kV breaker at Chesaco Park		BGE (100%)
b0796	Install 2, 115 kV breakers at Gwynnbrook		BGE (100%)
b0819	Remove line drop limitations at the substation terminations for Gwynnbrook – Mays Chapel 115 kV		BGE (100%)
b0820	Remove line drop limitations at the substation terminations and replace switch for Delight – Gwynnbrook 115 kV		BGE (100%)
b0821	Remove line drop limitations at the substation terminations for Northwest – Delight 115 kV		BGE (100%)
b0822	Remove line drop limitations at the substation terminations for Gwynnbrook – Sudbrook 115 kV		BGE (100%)
b0823	Remove line drop limitations at the substation terminations for Windy Edge – Texas 115 kV		BGE (100%)
b0824	Remove line drop limitations at the substation terminations for Granite – Harrisonville 115 kV		BGE (100%)
b0825	Remove line drop limitations at the substation terminations for Harrison – Dolefield 115 kV		BGE (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC \*\*East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

Remove line drop   limitations at the substation terminations for Riverside – East Point 115 kV	Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
Riverside — East Point 115 kV  Install an SPS for one year to trip a Mays Chapel 115 kV breaker one line 110579 for line overloads 110509  Disable the HS throwover at Harrisonville for one year  Rebuild each line (0.2 miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA  Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115 kV orticular to 110535 115 kV circuits. Reconfigure	1,002	limitations at the		PGP (1000)
Install an SPS for one year to trip a Mays Chapel 115 kV breaker one line 110579 for line overloads 110509   BGE (100%)	60826			BGE (100%)
Install an SPS for one year to trip a Mays Chapel 115 kV breaker one line 110579 for line overloads 110509  Disable the HS throwover at Harrisonville for one year  Rebuild each line (0.2 miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA  Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115 kV on the Center - Westport 115 kV circuits. Reconfigure				
to trip a Mays Chapel 115 kV breaker one line 110579 for line overloads 110509  Disable the HS throwover at Harrisonville for one year  Rebuild each line (0.2 miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA  Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure				
b0827 kV breaker one line 110579 for line overloads 110509  Disable the HS throwover at Harrisonville for one year  Rebuild each line (0.2 miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA  BGE (100%)  BGE (100%)		=		
Disable the HS throwover at Harrisonville for one year   BGE (100%)				
b0828 Disable the HS throwover at Harrisonville for one year  Rebuild each line (0.2 miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA  Increase contact parting time on Wagner 115 kV breaker 32-3/2  b0907 Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV oricuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure	b0827	kV breaker one line		BGE (100%)
Disable the HS throwover at Harrisonville for one year  Rebuild each line (0.2 miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA  Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure		110579 for line overloads		
b0828 at Harrisonville for one year  Rebuild each line (0.2 miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA  BGE (100%)  Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure		110509		
Rebuild each line (0.2 miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA  Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit.  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure		Disable the HS throwover		
Rebuild each line (0.2 miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA  Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuits. Reconfigure	b0828	at Harrisonville for one		BGE (100%)
miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA  Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuits.  Regular Market Magner on both 110534 and 110535 115 kV circuits. Reconfigure				
b0870 normal rating to 968 MVA and the emergency rating to 1227 MVA  Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure		`		
and the emergency rating to 1227 MVA  Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure		,		
to 1227 MVA  Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure	b0870	_		BGE (100%)
Increase contact parting time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure				
b0906 time on Wagner 115 kV breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits.  Reconfigure  BGE (100%)  BGE (100%)  APS (2.02%) / BGE (75.22%) / Dominion (16.10%) / PEPCO (6.66%)  BGE (100%)		to 1227 MVA		
breaker 32-3/2  Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure		<u> </u>		
Increase contact parting time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure	b0906	<u>o</u>		BGE (100%)
b0907 time on Wagner 115 kV breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure		breaker 32-3/2		
breaker 34-1/3  Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure  Rebuild Graceton - Bagley 230 kV as double circuit  APS (2.02%) / BGE (75.22%) / Dominion (16.10%) / PEPCO (6.66%)  BGE (100%)				
Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure  APS (2.02%) / BGE (75.22%) / Dominion (16.10%) / PEPCO (6.66%)  BGE (100%)	b0907	_		BGE (100%)
b1016  230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure  RPS (2.02%) / BGE (75.22%) / Dominion (16.10%) / PEPCO (6.66%)  BGE (100%)  BGE (100%)				
b1016  line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure  APS (2.02%) / BGE (75.22%) / Dominion (16.10%) / PEPCO (6.66%)  BGE (100%)				
b1016 Terminate new line at Graceton with a new circuit breaker.  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure  Dominion (16.10%) / PEPCO (6.66%)  BGE (100%)				APS (2.02%) / RGF (75.22%) /
b1055  Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure  Reconstruction (6.66%)  (6.66%)  BGE (100%)	b1016	_		
b1055  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure	01010			, , , , , , , , , , , , , , , , , , , ,
b1055  Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure				(0.0070)
b1055 Center 115kV on the Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure				
Center - Westport 115 kV circuit  Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure				
Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure	b1055			BGE (100%)
b1029 Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure	01055	-		DGL (10070)
b1029 Wagner on both 110534 and 110535 115 kV circuits. Reconfigure				
b1029 and 110535 115 kV circuits. Reconfigure		10		
circuits. Reconfigure				
	b1029			
Lipins Corner substation BGE (100%)		$\mathcal{E}$		
		Lipins Corner substation		BGE (100%)

The Annual Revenue Requirement associated with the Transmission Enhancement Charges are set forth and determined in Appendix A to Attachment H-2.

required	Transmission Enhancements A	Tillual Revenue Requirement	Responsible Customer(s)
b1030	Move the Hillen Rd substation from circuits 110507/110508 to circuits 110505/110506		BGE (100%)
b1031	Replace wire sections on Westport - Pumphrey 115 kV circuits #110521, 110524, 110525, and 110526		BGE (100%)
b1083	Upgrade wire sections of the Mays Chapel – Mt Washington circuits (110701 and 110703) to improve the rating to 260/300 SN/SE MVA		BGE (100%)
b1084	Extend circuit 110570 from Deer Park to Northwest, and retire the section of circuit 110560 from Deer Park to Deer Park tap and retire existing Deer Park Breaker		DCE (100%)
b1085	Upgrade substation wire conductors at Lipins Corner to improve the rating of Solley-Lipins Corner sections of circuits 110534 and 110535 to 275/311 MVA SN/SE		BGE (100%)  BGE (100%)
b1086	Build a new 115 kV switching station between Orchard St. and Monument St.		BGE (100%)
b1175	Apply SPS at Mt. Washington to delay load pick-up for one outage and for the other outage temporarily drop load		BGE (100%)

	E 6 6 15 1 1	<u> </u>	
	Transfer 6 MW of load		
b1176	from Mt. Washington –		
	East Towson		BGE (100%)
			APS (4.42%) / BGE (66.95%) /
	Duild a second Donked		ComEd (4.12%) / Dayton
b1251	Build a second Raphael – Bagley 230 kV		(0.49%) / Dominion (18.76%) /
	Bagiey 230 KV		PENELEC (0.05%) / PEPCO
			(5.21%)
			APS (4.42%) / BGE (66.95%) /
	Re-build the existing Raphael – Bagley 230 kV		ComEd (4.12%) / Dayton
b1251.1			(0.49%) / Dominion (18.76%) /
			PENELEC (0.05%) / PEPCO
			(5.21%)
	Upgrade terminal		
b1252	equipment (remove		
	terminal limitation at		
	Pumphrey Tap to bring		
	the circuit to 790N/941E		BGE (100%)

rtequirea	Tanishinssion Emidicements Tanida Revenue	requirement responsible Customer(s)
b1253	Replace the existing Northeast 230/115 kV transformer #3 with 500	
	MVA	BGE (100%)
b1253.1	Replace the Northeast 230 kV breaker '2317/315'	BGE (100%)
b1253.2	Revise reclosing on Windy Edge 115 kV breaker '110515'	BGE (100%)
b1253.3	Revise reclosing on Windy Edge 115 kV breaker '110516'	BGE (100%)
b1253.4	Revise reclosing on Windy Edge 115 kV breaker '110517'	BGE (100%)
b1254	Build a new 500/230 kV substation (Emory Grove)	APS (4.07%) / BGE (53.19%) / ComEd (3.71%) / Dayton (0.50%) / Dominion (16.44%) / PENELEC (0.59%) / PEPCO (21.50%)
b1254.1	Bundle the Emory – North West 230 kV circuits	BGE (100%)
b1267	Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits	BGE (100%)
b1267.1	Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation	BGE (100%)
b1267.2	Replace Mays Chapel 115 kV breaker '110515A'	BGE (100%)
b1267.3	Replace Mays Chapel 115 kV breaker '110579C'	BGE (100%)

required	Transmission Emancements	Annual Revenue Requirement	responsible editioner(s)
b1544	Advance the baseline upgrade B1252 to upgrade terminal equipment removing terminal limitation at Pumphrey Tap on BGE 230 kV circuit 2332-A		BGE (100%)
b1545	Upgrade terminal equipment at both Brandon Shores and Waugh Chapel removing terminal limitation on BGE 230 kV circuit 2343		BGE (100%)
b1546	Upgrade terminal equipment at Graceton removing terminal limitation on BGE portion of the 230 kV Graceton – Cooper circuit 2343		BGE (100%)
b1583	Replace Hazelwood 115 kV breaker '110602'		BGE (100%)
b1584	Replace Hazelwood 115 kV breaker '110604'		BGE (100%)
b1606.1	Moving the station supply connections of the Hazelwood 115/13kV station		BGE (100%)
b1606.2	Installing 115kV tie breakers at Melvale		BGE (100%)
b1785	Revise the reclosing for Pumphrey 115 kV breaker '110521 DR'		BGE (100%)
b1786	Revise the reclosing for Pumphrey 115 kV breaker '110526 DR'		BGE (100%)
b1789	Revise the reclosing for Pumphrey 115 kV breaker '110524DR'		BGE (100%)
b1806	Rebuild Wagner 115kV substation to 80kA		BGE (100%)

#### **SCHEDULE 12 – APPENDIX**

## (3) Delmarva Power & Light Company

required 1	Tarishiission Enhancements Ai	inuai 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%)

required		muai 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		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%)
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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC
\*\*East Coast Power, LLC

<sup>\*\*\*</sup>Hudson Transmission Partners, LLC

Required		annual Revenue Requirement	Responsible Customer(s)
b0295	Raise conductor		DPL (100%)
	temperature of North		
	Seaford – Pine Street –		
	Dupont Seaford		
b0296	Rehoboth/Cedar Neck Tap		DPL (100%)
00290	(6733-2) upgrade		DI L (100%)
	Create a new 230 kV station		
	that splits the 2 <sup>nd</sup> Milford to		
	Indian River 230 kV line,		
b0320	add a 230/69 kV		DPL (100%)
	transformer, and run a new		
	69 kV line down to		
	Harbeson 69 kV		
b0382	Cambridge Sub – Close		DPL (100%)
00362	through to Todd Substation		DFL (100%)
b0383	Wye Mills AT-1 and AT-2		DDI (1000/)
00363	138/69 kV Replacements		DPL (100%)
b0384	Replace Indian River AT-20		DPL (100%)
00364	(400 MVA)		DFL (100%)
b0385	Oak Hall to New Church		DPL (100%)
00363	(13765) Upgrade		DFL (100%)
b0386	Cheswold/Kent (6768)		DPL (100%)
00380	Rebuild		DFL (100%)
b0387	N. Seaford – Add a 2 <sup>nd</sup>		DPL (100%)
00367	138/69 kV autotransformer		DI L (100%)
b0388	Hallwood/Parksley (6790-2)		DPL (100%)
00366	Upgrade		DI L (100%)
b0389	Indian River AT-1 and AT-		DPL (100%)
00369	2 138/69 kV Replacements		DFL (100%)
PU30U	Rehoboth/Lewes (6751-1		DPI (100%)
00370	and 6751-2) Upgrade		DI L (100%)
b0391	Kent/New Meredith (6704-		DDI (10004)
	2) Upgrade		DI L (100%)
b0392	East New Market Sub –		
	Establish a 69 kV Bus		DPL (100%)
	Arrangement		
b0415	Increase the temperature		
	ratings of the Edgemoor –		
	Christiana – New Castle		DPL (100%)
	138 kV by replacing six		
	transmission poles		
b0390 b0391 b0392	Rehoboth/Lewes (6751-1 and 6751-2) Upgrade Kent/New Meredith (6704-2) Upgrade East New Market Sub — Establish a 69 kV Bus Arrangement Increase the temperature ratings of the Edgemoor — Christiana — New Castle 138 kV by replacing six		DPL (100%)  DPL (100%)  DPL (100%)

Transmission Emiliare ments 7 unital revenue requirement	(-)
Spare Keeney 500/230 kV	DPL (100%)
	((
Additional spare Keeney 500/230 kV transformer	DPL (100%)
Rebuild Lank – Five Points 69 kV	DPL (100%)
Replace wave trap at Indian River 138 kV on the Omar – Indian River 138 kV circuit	DPL (100%)
Rebuild Millsboro – Zoar REA 69 kV	DPL (100%)
Replace Church 138/69 kV transformer and add two breakers	DPL (100%)
Build Oak Hall – Wattsville 138 kV line	DPL (100%)
Add 138/69 kV transformer at Wattsville	DPL (100%)
Establish 138 kV bus position at Oak Hall	DPL (100%)
Re-tension Worcester – Berlin 69 kV for 125°C	DPL (100%)
Re-tension Taylor – North Seaford 69 kV for 125°C	DPL (100%)
Install a 2 <sup>nd</sup> Red Lion 230/138 kV	DPL (100%)
Hares Corner – Relay Improvement	DPL (100%)
Reybold – Relay Improvement	DPL (100%)
New Castle – Relay Improvement	DPL (100%)
	Spare Keeney 500/230 kV transformer  Additional spare Keeney 500/230 kV transformer  Rebuild Lank – Five Points 69 kV  Replace wave trap at Indian River 138 kV on the Omar – Indian River 138 kV circuit  Rebuild Millsboro – Zoar REA 69 kV  Replace Church 138/69 kV transformer and add two breakers  Build Oak Hall – Wattsville 138 kV line  Add 138/69 kV transformer at Wattsville  Establish 138 kV bus position at Oak Hall  Re-tension Worcester – Berlin 69 kV for 125°C  Re-tension Taylor – North Seaford 69 kV for 125°C Install a 2 <sup>nd</sup> Red Lion 230/138 kV  Hares Corner – Relay Improvement  Reybold – Relay Improvement  New Castle – Relay

required			Responsible Customer(s)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
	MAPP Project – install new		EKPC (1.77%) / JCPL (3.84%) /
	500 kV transmission from		ME (1.93%) / NEPTUNE*
	Possum Point to Calvert		(0.45%) / OVEC (0.07%) /
	Cliffs and install a DC line		PECO (5.29%) / PENELEC
b0512	from Calvert Cliffs to		(1.89%) / PEPCO (3.82%) / PPL
	Vienna and a DC line from		(4.72%) / PSEG (6.21%) / RE
	Calvert Cliffs to Indian		(0.26%)
	River		DFAX Allocation:
	River		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%)
	Rebuild the Ocean Bay –		
b0513	Maridel 69 kV line		DPL (100%)
1.0505	Replace existing 12 MVAR		DDI (4000())
b0527	capacitor at Bethany with a		DPL (100%)
	30 MVAR capacitor		
	Replace existing 69/12 kV		777 (1007)
b0528	transformer at Bethany with		DPL (100%)
	a 138/12 kV transformer		

<sup>\*</sup>Neptune Regional Transmission System, LLC

rtequirea	Transmission Emancements Ai	inuai Kevenue Kequirement	Responsible Customer(s)
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%)
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%)

<sup>\*\*</sup>East Coast Power, LLC

required	Transmission Enhancements An	inuai Revenue Requirement	Responsible Customer(s)
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%)
b0751	Add two additional breakers at Keeney 500 kV		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
			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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

rtequirea	Tansinission Emancements 71	maar revenae requirement	responsible Editionier(b)
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%)
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 - Sto ckton - 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%)

<sup>\*</sup> 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.

<sup>\*\*</sup>East Coast Power, LLC

<sup>\*\*\*</sup>Hudson Transmission Partners, LLC

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%)

#### **SCHEDULE 12 – APPENDIX**

#### (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

rtequirea	Transmission Emiancements 1	innaar ite venae itequiren	ient 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\*East Coast Power, L.L.C.

# (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

required		Annual Revenue Requirem	ient 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

# (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Required	Transmission Emiancements	Timuai Revenue Requiren	ient Responsible Customer(s)
	Reconductor the Collins –		
b1366	Cly – Newberry 115 kV		
01300	(975) line 5 miles with 795		
	ACSR		ME (100%)
	Reconductor 2.4 miles of		
	existing 556 and 795		
b1727	ACSR from Harley		
01/2/	Davidson to Pleasureville		
	115 kV with 795 ACSS to		
	raise the ratings		ME (100%)
			Load-Ratio Share
			Allocation:
			AEC (1.71%) / AEP (14.04%)
			/ APS (5.61%) / ATSI
			(8.10%) / BGE (4.36%) /
			ComEd (13.14%) / Dayton
			(2.15%) / DEOK (3.23%) /
	I . II . 500 MALAD GAG		DL (1.73%) / DPL (2.65%) /
1 1000	Install a 500 MVAR SVC		` '
b1800	at the existing Hunterstown		
	500kV substation		(1.93%) / NEPTUNE*
			(0.45%) / OVEC (0.07%) /
			PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) /
			PPL (4.72%) / PSEG (6.21%)
			/ RE (0.26%)
			DFAX Allocation:
			DPL (45.54%) / ME (54.46%)
			AEC (6.47%) / AEP (2.58%) /
			APS (6.88%) / BGE (6.57%) /
			DPL (12.39%) / Dominion
b1801	Build a 250 MVAR SVC at		(14.89%) / JCPL (8.14%) /
01901	Altoona 230 kV		ME (6.21%) / Neptune*
			(0.82%) / PECO (21.56%) /
			PPL (4.89%) / PSEG (8.18%)
			/ RE (0.33%) / ECP** (0.09%

<sup>\*</sup>Neptune Regional Transmission System, LLC

# (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Customer	$\mathbf{r}(\mathbf{s})$	
	Replace SCCIR (Sub-	
b1816.5	conductor) at Hunterstown	
01010.5	Substation on the No. 1,	
	230/115 kV transformer	ME (100%)
	Replace limiting wave trap,	
	circuit breaker, substation	
b1999	conductor, relay and	
	current transformer	
	components at Northwood	ME (100%)
	Replace limiting wave trap	
b2000	on the Glendon -	
	Hosensack line	ME (100%)
	Replace limiting circuit	
	breaker and substation	
b2001	conductor transformer	
	components at Portland	
	230kV	ME (100%)
b2002	Northwood 230/115 kV	
02002	Transformer upgrade	ME (100%)
	Construct a new North	
b2023	Temple - Riverview -	
02020	Cartech 69 kV line (4.7	
	miles) with 795 ACSR	ME (100%)
1.0001	Upgrade 4/0 substation	
b2024	conductors at Middletown	7 57 (1001)
	69 kV	ME (100%)
	Upgrade 4/0 and 350 Cu	
	substation conductors at	
b2025	the Middletown Junction	
	terminal of the Middletown	
	Junction - Wood Street Tap	ME (1000/)
	69 kV line	ME (100%)
1-2026	Upgrade an OC protection	
b2026	relay at the Baldy 69 kV	MT: (1000/)
	substation Install a 115 kV 28.8	ME (100%)
<b>L2140</b>		
b2148	MVAR capacitor at Pleasureville substation	MT: (1000/ \
	rieasurevine substation	ME (100%)

# (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

#### **SCHEDULE 12 – APPENDIX**

# (7) Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone

Required T	ransmission Enhancements	Annual Revenue Requiremen	nt Responsible Customer(s)
			AEC (1.71%) / AEP (14.04%)
	Build 500 kV substation		/ APS (5.61%) / ATSI (8.10%)
			/ BGE (4.36%) / ComEd
	in PENELEC – Tap the		(13.14%) / Dayton (2.15%) /
	Keystone – Juniata and	D	DEOK (3.23%) / DL (1.73%) /
	Conemaugh – Juniata 500		DPL (2.65%) / Dominion
b0284.1	kV, connect the circuits		(13.03%) / EKPC (1.77%) /
	with a breaker and half		JCPL (3.84%) / ME (1.93%) /
	scheme, and install new		NEPTUNE* (0.45%) / OVEC
	400 MVAR capacitor		(0.07%) / PECO (5.29%) /
	400 W VIII capacitor		PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			AEC (1.71%) / AEP (14.04%)
			/ APS (5.61%) / ATSI (8.10%)
			/ BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
	Replace wave trap and		DEOK (3.23%) / DL (1.73%) /
	upgrade a bus section at		DPL (2.65%) / Dominion
b0284.3	Keystone 500 kV – on the		(13.03%) / EKPC (1.77%) /
	Keystone – Airydale 500		JCPL (3.84%) / ME (1.93%) /
	kV		NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

<sup>\*\*\*</sup>Hudson Transmission Partners, LLC

**Required Transmission Enhancements** Annual Revenue Requirement Responsible Customer(s) AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / Replace wave trap at DPL (2.65%) / Dominion Keystone 500 kV – on the b0285.1 (13.03%) / EKPC (1.77%) / Keystone – Conemaugh JCPL (3.84%) / ME (1.93%) / 500 kV NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / Replace wave trap and DPL (2.65%) / Dominion relay at Conemaugh 500 b0285.2 (13.03%) / EKPC (1.77%) / kV – on the Conemaugh – JCPL (3.84%) / ME (1.93%) / Keystone 500 kV NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

<sup>\*\*\*</sup>Hudson Transmission Partners, LLC

**Required Transmission Enhancements** Annual Revenue Requirement Responsible Customer(s) Upgrade Rolling b0349 Meadows-Gore Jct 115 kVPENELEC (100%) Construction of a ring bus b0360 on the 345 kV side of Wayne substation **PENELEC** (100%) Add a 50 MVAR, 230 kV b0365 cap bank at Altoona 230 kV**PENELEC** (100%) AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / Install 100 MVAR DPL (2.65%) / Dominion Dynamic Reactive Device b0369 (13.03%) / EKPC (1.77%) / at Airydale 500 kV JCPL (3.84%) / ME (1.93%) / substation NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / Install 500 MVAR DPL (2.65%) / Dominion Dynamic Reactive Device b0370 (13.03%) / EKPC (1.77%) / at Airydale 500 kV JCPL (3.84%) / ME (1.93%) / substation NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

<sup>\*\*\*</sup>Hudson Transmission Partners, LLC

Required		Allitual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share
			Allocation:
			AEC (1.71%) / AEP (14.04%)
			/ APS (5.61%) / ATSI (8.10%)
			/ BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
			DEOK (3.23%) / DL (1.73%) /
			DPL (2.65%) / Dominion
			(13.03%) / EKPC (1.77%) /
	Install 300 MVAR		JCPL (3.84%) / ME (1.93%) /
b0376	capacitor at Conemaugh		NEPTUNE* (0.45%) / OVEC
	500 kV substation		(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			AEC (5.58%) / BGE (18.21%)
			/ JCPL (18.24%) / ME
			(11.07%) / NEPTUNE (2.03%)
			/ PECO (18.80%) / PSEG
			(25.07%) / RE (1.00%)
b0442	Spare Keystone 500/230		
00442	kV transformer		PENELEC (100%)
	Replace Lewistown		
b0515	circuit breaker 1LY		
	Yeagertown		PENELEC (100%)
			TEI(EEEE (10070)
b0516	Replace Lewistown circuit breaker 2LY		
00310			
	Yeagertown		PENELEC (100%)
b0517	Replace Shawville bus		
0031/	section circuit breaker		PENELEC (100%)
	Replace Homer City		
b0518	circuit breaker 201		
00310	Johnstown		DENELEG (1000/)
	Johnstown		PENELEC (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

<sup>\*\*\*</sup>Hudson Transmission Partners, LLC

**Required Transmission Enhancements** Annual Revenue Requirement Responsible Customer(s) Replace Keystone circuit b0519 breaker 4 Transformer - 20 **PENELEC** (100%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME Install 250 MVAR (1.93%) / NEPTUNE\* b0549 capacitor at Keystone 500 (0.45%) / OVEC (0.07%) / kV PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** AEC (5.55%) / BGE (22.16%) / JCPL (16.44%) / ME (12.45%) / NEPTUNE (1.83%) / PECO (18.75%) / PSEG (21.95%) / RE (0.87%) AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL Install 25 MVAR capacitor (18.16%) / ME (1.55%) / b0550 at Lewis Run 115 kV Neptune\* (1.77%) / PECO (21.78%) / PPL (6.40%) / substation ECP\*\* (0.73%) / PSEG (26.13%) / RE (0.97%) AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Install 25 MVAR capacitor b0551 at Saxton 115 kV Neptune\* (1.77%) / PECO (21.78%) / PPL (6.40%) / substation ECP\*\* (0.73%) / PSEG (26.13%) / RE (0.97%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

<sup>\*\*\*</sup>Hudson Transmission Partners, LLC

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

**Required Transmission Enhancements** Annual Revenue Requirement Responsible Customer(s) Replace Shawville 115 b1011 kV breaker 'Philipsburg' PENELEC (100%) Replace Shawville 115 b1012 kV breaker 'Garman' **PENELEC** (100%) Replace a CRS relay at Hooversville 115 kV b1059 station PENELEC (100%) Replace a CRS relay at Rachel Hill 115 kV b1060 station **PENELEC** (100%) AEC (3.74%) / APS (6.26%) / BGE (16.82%) / DL (0.32%) / Upgrade Conemaugh JCPL (12.57%) / ME (6.89%) / 500/230 kV transformer PECO (11.53%) / PEPCO and add a new line from b1153 (0.55%) / PPL (15.42%) / PSEG Conemaugh-Seward 230 (20.52%) / RE (0.72%) / kV NEPTUNE\* (1.70%) / ECP\*\* (2.96%)Revise the reclosing on the Shelocta 115 kV b1153.1 breaker 'Lucerne' **PENELEC** (100%) Replace Shawville 115 b1169 kV breaker '#1A XFMR' **PENELEC** (100%) Replace Shawville 115 b1170 kV breaker '#2A XFMR' PENELEC (100%) Build a new Osterburg East – Bedford North 115 b1277 kV Line, 5.7 miles of 795 **ACSR PENELEC** (100%) Install 25 MVAR Capacitor Bank at b1278 Somerset 115 kV **PENELEC** (100%)

Required I	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Replace the Cambria		
b1367	Slope 115/46 kV 50		
01307	MVA transformer with		
	75 MVA		PENELEC (100%)
	Replace the Claysburg		
b1368	115/46 kV 30 MVA		
01308	transformer with 75		
	MVA		PENELEC (100%)
	Replace the 4/0 CU		
	substation conductor with		
b1369	795 ACSR on the		
	Westfall S21 Tap 46 kV		
	line		PENELEC (100%)
	Install a 3rd 115/46 kV		
b1370			
	transformer at Westfall		PENELEC (100%)
	Reconductor 2.6 miels of		
b1371	the Claysburg – HCR 46		
	kV line with 636 ACSR		PENELEC (100%)
	Replace 4/0 CU		·
	substation conductor with		
b1372	795 ACSR on the		
	Hollidaysburg – HCR 46		
	kV		PENELEC (100%)
	Re-configure the Erie		
	West 345 kV substation,		
b1373	add a new circuit breaker		
	and relocate the		
	Ashtabula line exit		PENELEC (100%)
	Replace wave traps at		
	Raritan River and Deep		
1.1274	Run 115 kV substations		
b1374	with higher rated		
	equipment for both B2		
	and C3 circuits		PENELEC (100%)
	Reconductor 0.8 miles of		•
h1525	the Gore Junction – ESG		
b1535	Tap 115 kV line with 795		
	ACSS		PENELEC (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\* East Coast Power, L.L.C.

Annual Revenue Requirement Responsible Customer(s)

Required I	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1607	Reconductor the New Baltimore - Bedford		DENEL EG (1000)
	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\* East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace the Erie South 115 kV breaker 'Union b1821 City' **PENELEC** (100%) Construct a 115 kV ring bus at Claysburg Substation. Bedford b1943 North and Saxton lines will no longer share a common breaker PENELEC (100%) Reconductor Eclipse substation 115 kV bus b1944 with 1033 kcmil conductor **PENELEC** (100%) Install second 230/115 b1945 kV autotransformer at Johnstown PENELEC (100%) Replace the 1200 Amp Line trap at Lewistown on the Raystownb1966 Lewistown 230 kV line and replace substation conductor at Lewistown **PENELEC** (100%) Replace the Blairsville b1967 138/115 kV transformer **PENELEC** (100%) Install a 25 MVAR 115 b1990 kV Capacitor at Grandview PENELEC (100%) Construct Farmers Valley 345/230 kV and 230/115 kV substation. Loop the b1991 Homer City-Stolle Road 345 kV line into Farmers Valley PENELEC (100%) Reconductor Cambria Slope-Summit 115kV b1992 with 795 ACSS Conductor PENELEC (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

required i	Tansinission Enhancements	Annual Revenue Requirement	1 (/
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%)

		<b>_</b>	1 \ /
b1998	Install a 75 MVAR 115 kV Capacitor at Shawville		PENELEC (100%)
b2016	Reconductor bus at Wayne 115 kV station		PENELEC (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

#### **SCHEDULE 12 – APPENDIX**

### (8) PECO Energy Company

Required 7	Transmission Enhancements	Annual Revenue Requireme	ent Responsible Customer(s)
			Load-Ratio Share
			Allocation:
			AEC (1.71%) / AEP (14.04%)
			/ APS (5.61%) / ATSI (8.10%)
			/ BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
	Replace two 500 kV		DEOK (3.23%) / DL (1.73%) /
	circuit breakers and two		DPL (2.65%) / Dominion
	wave traps at Elroy		(13.03%) / EKPC (1.77%) /
b0171.1	substation to increase		JCPL (3.84%) / ME (1.93%) /
	rating of Elroy -		NEPTUNE* (0.45%) / OVEC
	Hosensack 500 kV		(0.07%) / PECO (5.29%) /
	Hosensack 500 k v		PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			AEC (8.78%) / DPL (9.27%) /
			JCPL (19.92%) / PECO
			(62.03%)
	Replace Whitpain 230kV		
b0180	circuit breaker #165		PECO (100%)
	Replace Whitpain 230kV		
b0181	circuit breaker #J105		PECO (100%)
	Upgrade Plymouth		
	Meeting 230kV circuit		
b0182	breaker #125		PECO (100%)
	Install three 28.8Mvar		
	capacitors at Planebrook		
b0205	35kV substation		PECO (100%)
	Install 161Mvar capacitor		AEC (14.20%) / DPL
b0206	at Planebrook 230kV		(24.39%) / PECO (57.94%) /
	substation		PSEG (3.47%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required 1	ransmission Enhancements Annual Revenue Requirement	it Responsible Customer(s)
1-0207	Install 161Mvar capacitor	AEC (14.20%) / DPL
b0207	at Newlinville 230kV	(24.39%) / PECO (57.94%) /
	substation	PSEG (3.47%)
	Install 161Mvar capacitor	AEC (14.20%) / DPL
b0208	Heaton 230kV substation	(24.39%) / PECO (57.94%) /
	Heaton 250k v substation	PSEG (3.47%)
	Install 2% series reactor at	
b0209	Chichester substation on	AEC (65.23%) / JCPL
00209	the Chichester -	(25.87%)/ Neptune* (2.55%) /
	Mickleton 230kV circuit	PSEG (6.35%)
	Upgrade Chichester –	
	Delco Tap 230 kV and the	
b0264	PECO portion of the	
	Delco Tap – Mickleton	AEC (89.87%) / JCPL (9.48%)
	230 kV circuit	/ Neptune* (0.65%)
	Replace two wave traps	
	and ammeter at Peach	
1.0266	Bottom, and two wave	
b0266	traps and ammeter at	
	Newlinville 230 kV	
	substations	PECO (100%)
	substations	PECO (100%)  Load-Ratio Share
	substations	` '
	substations	Load-Ratio Share Allocation:
	substations	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%)
	substations	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%)
	substations	Load-Ratio Share
		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) /
	Install a new 500 kV	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) /
	Install a new 500 kV Center Point substation in	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%)
b0269	Install a new 500 kV Center Point substation in PECO by tapping the	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) /
b0269	Install a new 500 kV Center Point substation in	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%)
b0269	Install a new 500 kV Center Point substation in PECO by tapping the	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%)     / BGE (4.36%) / ComEd     (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion     (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC
b0269	Install a new 500 kV Center Point substation in PECO by tapping the Elroy – Whitpain 500 kV	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) /
b0269	Install a new 500 kV Center Point substation in PECO by tapping the Elroy – Whitpain 500 kV	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%)
b0269	Install a new 500 kV Center Point substation in PECO by tapping the Elroy – Whitpain 500 kV	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%)     / BGE (4.36%) / ComEd     (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion     (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC     (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO     (3.82%) / PPL (4.72%) / PSEG
b0269	Install a new 500 kV Center Point substation in PECO by tapping the Elroy – Whitpain 500 kV	Load-Ratio Share     Allocation:  AEC (1.71%) / AEP (14.04%)     / APS (5.61%) / ATSI (8.10%)     / BGE (4.36%) / ComEd     (13.14%) / Dayton (2.15%) /  DEOK (3.23%) / DL (1.73%) /  DPL (2.65%) / Dominion     (13.03%) / EKPC (1.77%) /  JCPL (3.84%) / ME (1.93%) /  NEPTUNE* (0.45%) / OVEC     (0.07%) / PECO (5.29%) /  PENELEC (1.89%) / PEPCO     (3.82%) / PPL (4.72%) / PSEG     (6.21%) / RE (0.26%) †
b0269	Install a new 500 kV Center Point substation in PECO by tapping the Elroy – Whitpain 500 kV	Load-Ratio Share
b0269	Install a new 500 kV Center Point substation in PECO by tapping the Elroy – Whitpain 500 kV	Load-Ratio Share     Allocation:  AEC (1.71%) / AEP (14.04%)     / APS (5.61%) / ATSI (8.10%)     / BGE (4.36%) / ComEd     (13.14%) / Dayton (2.15%) /  DEOK (3.23%) / DL (1.73%) /  DPL (2.65%) / Dominion     (13.03%) / EKPC (1.77%) /  JCPL (3.84%) / ME (1.93%) /  NEPTUNE* (0.45%) / OVEC     (0.07%) / PECO (5.29%) /  PENELEC (1.89%) / PEPCO     (3.82%) / PPL (4.72%) / PSEG     (6.21%) / RE (0.26%) †

<sup>\*</sup> Neptune Regional Transmission System, LLC

required 1	Tarisi inssion Linarecticits 7	unium Revenue Requirement	Responsible Customer(s)
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%)††

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>†</sup>Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

<sup>††</sup>Cost allocations associated with below 500 kV elements of the project

Load-Ratio Share   Allocation:	Kequileu 11	ansmission Ennancements Ai	nnual Revenue Requirement	Responsible Customer(s)
AEC (1.71%) / AEP (14.04%)     / APS (5.61%) / ATSI (8.10%)     / APS (5.61%) / Dayton (2.15%) /   DEOK (3.23%) / DL (1.73%) /   DEOK (3.23%) / DL (1.73%) /   DEOK (3.23%) / DL (1.73%) /   DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) /   JCPL (3.84%) / ME (1.93%) /   JCPL (3.84%) / ME (1.93%) /   JCPL (3.84%) / ME (1.93%) /   NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) /   PENELEC (1.89%) / PECO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)   DFAX Allocation: AEC (7.30%) / PECO (92.70%)   DFAX Allocation: AEC (7.30%) / PECO (92.70%)   AEC (7.30%) / PECO (92.70%)   Install a new 230 kV     Center Point substation in PECO by tapping the PECO by tapping the North Wales – Perkiomen 230 kV circuit. Install a new 500/230 kV Center Point transformer     AEC (8.25%) / DPL (9.56%) / PECO (82.19%) †     Install 161 MVAR     Capacitor at Warrington 230 kV substation     Install 128.8 MVAR     Capacitor at Bradford 230 kV substation     Install 28.8 MVAR     Doz80.3     Install 28.8 MVAR     Capacitor at Warrington     Install 28.8				
Add a new 500 kV   DEOK (3.23%) / DEOK (3.24%) / MECOK (0.07%) / PECO (5.29%) / PECOK (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PECO (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PECO (0.25%) / DFAX Allocation:    AEC (7.30%) / PECO (92.70%)				
Add a new 500 kV   DEOK (3.23%) / DL (1.73%) / DEOK (3.23%) / DL (1.73%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)   DFAX Allocation: AEC (7.30%) / PECO (92.70%)				AEC (1.71%) / AEP (14.04%)
Add a new 500 kV   DEOK (3.23%) / DL (1.73%) / DEOK (3.23%) / DL (1.73%) / DEOK (3.23%) / DL (1.73%) / DPU (2.65%) / Deminion   DPU (2.65%) / Deminion   DPU (2.65%) / Deminion   DPU (3.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PECO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)   DFAX Allocation: AEC (7.30%) / PECO (92.70%)				/ APS (5.61%) / ATSI (8.10%)
Add a new 500 kV   DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion   DPL (2.65%) / Dominion   DPL (2.65%) / Dominion   DPL (3.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)   DFAX Allocation: AEC (7.30%) / PECO (92.70%)				` ,
Add a new 500 kV breaker at Whitpain between #3 transformer and 5029 line    DPL (2.65%) / Dominion   (13.03%) / EKPC (1.77%) /   JCPL (3.84%) / ME (1.93%) /   NEPTUNE* (0.45%) / OVEC   (0.07%) / PECO (5.29%) /   PENELEC (1.89%) / PEPCO   (3.82%) / PPL (4.72%) / PSEG   (6.21%) / RE (0.26%)   DFAX Allocation:   AEC (7.30%) / PECO   (92.70%)   AEC (7.30%) / PECO   (92.70%)   DFAX allocation:   AEC (7.30%) / PECO   (92.70%)   DFAX allocation:   AEC (7.30%) / PECO   (92.70%)   DFAX allocation:   AEC (8.25%) / DPL (9.56%) /   PECO (100%)   AEC (8.25%) / DPL (9.56%) /   PECO (82.19%) † †   Install 161 MVAR   capacitor at Warrington   230 kV substation   DECO 100%   Install 161 MVAR   capacitor at Bradford 230 kV substation   Install 128.8 MVAR   Install 28.8 MVAR   Capacitor at Warrington				` ' '
b0269.6 breaker at Whitpain between #3 transformer and 5029 line (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) DFAX Allocation:  AEC (7.30%) / PECO (92.70%)  B0269.7 Replace North Wales 230 kV breaker #105  Install a new 230 kV Center Point substation in PECO by tapping the North Wales – Perkiomen 230 kV circuit. Install a new 500/230 kV Center Point transformer  North Wales – Perkiomen 230 kV circuit. Install a new 500/230 kV Center Point transformer  Install 161 MVAR capacitor at Warrington 230 kV substation  Install 161 MVAR capacitor at Bradford 230 kV substation PECO 100%  Install 28.8 MVAR capacitor at Warrington  Install 28.8 MVAR capacitor at Warrington  Install 28.8 MVAR capacitor at Warrington				
between #3 transformer and 5029 line    DCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)    DFAX Allocation: AEC (7.30%) / PECO (92.70%)    Boundary		Add a new 500 kV		` ,
between #3 transformer and 5029 line    DCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PECO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)    DFAX Allocation: AEC (7.30%) / PECO (92.70%)    DFAX Allocation: AEC (7.30%) / PECO (92.70%)    DFAX Allocation: AEC (7.30%) / PECO (92.70%)    Install a new 230 kV	b0269.6			` ' '
(0.07%) / PECO (5.29%) / PENELEC (1.89%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)   DFAX Allocation: AEC (7.30%) / PECO (92.70%)   Boundary	00207.0			
PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)		and 5029 line		` ,
(3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)				
(6.21%) / RE (0.26%)   DFAX Allocation:   AEC (7.30%) / PECO (92.70%)   b0269.7   Replace North Wales 230 kV breaker #105   PECO (100%)   Install a new 230 kV   Center Point substation in PECO by tapping the   North Wales – Perkiomen 230 kV circuit. Install a new 500/230 kV Center Point transformer   AEC (8.25%) / DPL (9.56%) / Peco (82.19%)††				` '
DFAX Allocation: AEC (7.30%) / PECO (92.70%)  b0269.7 Replace North Wales 230 kV breaker #105 PECO (100%)  Install a new 230 kV Center Point substation in PECO by tapping the North Wales – Perkiomen 230 kV circuit. Install a new 500/230 kV Center Point transformer AEC (8.25%) / DPL (9.56%) / Peco (82.19%)††  Install 161 MVAR b0280.1 capacitor at Warrington 230 kV substation PECO 100%  Install 161 MVAR b0280.2 capacitor at Bradford 230 kV substation PECO 100%  Install 28.8 MVAR b0280.3 capacitor at Warrington				` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `
AEC (7.30%) / PECO (92.70%)    Boundary September   Peco (92.70%)				
Bolate   Replace North Wales 230   Replace North Wales 230   RV breaker #105   PECO (100%)				
Bo269.7   Replace North Wales 230   kV breaker #105   PECO (100%)				` '
Doc   North Wales - Perkiomen   230 kV   Center Point substation in PECO by tapping the				(92.70%)
Install a new 230 kV Center Point substation in PECO by tapping the North Wales – Perkiomen 230 kV circuit. Install a new 500/230 kV Center Point transformer  Install 161 MVAR capacitor at Warrington 230 kV substation  Install 161 MVAR b0280.2  Install 161 MVAR capacitor at Bradford 230 kV substation  Install 28.8 MVAR b0280.3  Install 28.8 MVAR capacitor at Warrington	b0260.7	Replace North Wales 230		
Center Point substation in PECO by tapping the   North Wales – Perkiomen   230 kV circuit. Install a   new 500/230 kV Center   Point transformer   PECO (82.19%)††   Install 161 MVAR   capacitor at Warrington   230 kV substation   PECO 100%   Install 161 MVAR   capacitor at Bradford 230 kV substation   PECO 100%   Install 28.8 MVAR   Capacitor at Warrington   PECO 100%   Install 28.8 MVAR   Capacitor at Warrington   PECO 100%   Capacitor at Warrington   Capacit	00209.7	kV breaker #105		PECO (100%)
PECO by tapping the   North Wales – Perkiomen   230 kV circuit. Install a   new 500/230 kV Center   Point transformer   PECO (82.19%)††		Install a new 230 kV		
b0269.10 North Wales – Perkiomen 230 kV circuit. Install a new 500/230 kV Center Point transformer PECO (82.19%)†† Install 161 MVAR capacitor at Warrington 230 kV substation PECO 100% Install 161 MVAR b0280.2 capacitor at Bradford 230 kV substation PECO 100% Install 28.8 MVAR capacitor at Warrington Capacitor at Warrington Capacitor at Warrington PECO 100%		Center Point substation in		
230 kV circuit. Install a new 500/230 kV Center Point transformer Point transformer Point transformer PECO (82.19%)††  Install 161 MVAR capacitor at Warrington 230 kV substation PECO 100%  Install 161 MVAR capacitor at Bradford 230 kV substation PECO 100%  Install 28.8 MVAR b0280.3 capacitor at Warrington				
new 500/230 kV Center Point transformer  Install 161 MVAR capacitor at Warrington 230 kV substation PECO 100%  Install 161 MVAR capacitor at Bradford 230 kV substation PECO 100%  Install 28.8 MVAR b0280.3 capacitor at Warrington	b0269.10	North Wales – Perkiomen		
Point transformer Install 161 MVAR capacitor at Warrington 230 kV substation PECO 100% Install 161 MVAR capacitor at Bradford 230 kV substation PECO 100% Install 28.8 MVAR capacitor at Warrington Capacitor at Warrington PECO 100%  Install 28.8 MVAR capacitor at Warrington		230 kV circuit. Install a		
Install 161 MVAR capacitor at Warrington 230 kV substation PECO 100%  Install 161 MVAR capacitor at Bradford 230 kV substation PECO 100%  Install 28.8 MVAR b0280.3 capacitor at Warrington		new 500/230 kV Center		AEC (8.25%) / DPL (9.56%) /
b0280.1 capacitor at Warrington 230 kV substation PECO 100%  Install 161 MVAR capacitor at Bradford 230 kV substation PECO 100%  Install 28.8 MVAR b0280.3 capacitor at Warrington		Point transformer		PECO (82.19%)††
230 kV substation PECO 100%  Install 161 MVAR capacitor at Bradford 230 kV substation PECO 100%  Install 28.8 MVAR b0280.3 capacitor at Warrington		Install 161 MVAR		
Install 161 MVAR capacitor at Bradford 230 kV substation PECO 100% Install 28.8 MVAR capacitor at Warrington	b0280.1	capacitor at Warrington		
b0280.2 capacitor at Bradford 230 kV substation PECO 100%  Install 28.8 MVAR capacitor at Warrington		230 kV substation		PECO 100%
kV substation PECO 100%  Install 28.8 MVAR b0280.3 capacitor at Warrington		Install 161 MVAR		
Install 28.8 MVAR b0280.3 capacitor at Warrington	b0280.2	capacitor at Bradford 230		
b0280.3 capacitor at Warrington		kV substation		PECO 100%
		Install 28.8 MVAR		
34 kV substation PECO 100%	b0280.3	capacitor at Warrington		
		34 kV substation		PECO 100%

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>†</sup>Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

<sup>††</sup>Cost allocations associated with below 500 kV elements of the project

1,1111	Install 18 MVAR	 Responsible Eustomer(s)
b0280.4	capacitor at Waverly 13.8	
00280.4	kV substation	PECO 100%
	K V Substation	Load-Ratio Share
		Allocation:
		AEC (1.71%) / AEP (14.04%)
		/ APS (5.61%) / ATSI (8.10%)
		/ BGE (4.36%) / ComEd
		(13.14%) / Dayton (2.15%) /
		DEOK (3.23%) / DL (1.73%) /
	Install 600 MVAR	DPL (2.65%) / Dominion
	Dynamic Reactive Device	(13.03%) / EKPC (1.77%) /
b0287	in Whitpain 500 kV	JCPL (3.84%) / ME (1.93%) /
	vicinity	NEPTUNE* (0.45%) / OVEC
	Vieinity	(0.07%) / PECO (5.29%) /
		PENELEC (1.89%) / PEPCO
		(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)
		DFAX Allocation:
		AEC (8.78%) / DPL (9.27%) /
		JCPL (19.92%) / PECO
		(62.03%)
1.0251	Reconductor Tunnel –	
b0351	Grays Ferry 230 kV	PECO (100%)
	Reconductor Tunnel –	
b0352	Parrish 230 kV	PECO (100%)
	Install 2% reactors on	1 ECO (100%)
b0353.1	both lines from Eddystone	
00555.1	– Llanerch 138 kV	PECO (100%)
		PECO (100%)
	Install identical second	
1.0252.2	230/138 kV transformer	
b0353.2	in parallel with existing	
	230/138 kV transformer at	PEGG 1000/
	Plymouth Meeting	PECO 100%
b0353.3	Replace Whitpain 230 kV	
00333.3	breaker 135	PECO (100%)
	Replace Whitpain 230 kV	
b0353.4	breaker 145	DEGO (1000()
	orcarci 143	PECO (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>††</sup>Cost allocations associated with below 500 kV elements of the project

11040111001		mai Kevenue Kequitement	responsible edistorier(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%)

<sup>\*</sup>Neptune Regional Transmission Partners, LLC
\*\*East Coast Power, L.L.C.

required 1	Tarishiission Emiancements A	Allitual Revenue Requirement	Responsible Cusiomer(s)
	Rebuild Bryn Mawr –		177 (1 271) (77-
b0727	Plymouth Meeting 138		AEC (1.25%) / DPL
	kV line		(3.11%) / PECO (95.64%)
	Reconductor the line to		AEC (0.72%) / JCPL
	provide a normal rating of		(17.36%) / NEPTUNE*
b0789	677 MVA and an		(1.70%) / PECO (44.47%) /
	emergency rating of 827		ECP** (0.92%) / PSEG
	MVA		(33.52%) / RE (1.31%)
	Reconductor the Bradford		
	– Planebrook 230 kV Ckt.		JCPL (17.30%)/
b0790	220-31 to provide a		NEPTUNE* (1.69%)/
υυ / <b>9</b> U	normal rating of 677		PECO (45.09%) / ECP**
	MVA and emergency		(0.93%) / PSEG (33.68%) /
	rating of 827 MVA	<u> </u>	RE (1.31%)
b0020 1	Replace Whitpain 230 kV		
b0829.1	breaker '155'		PECO (100%)
	Install 2 new 230 kV		
	breakers at Planebrook		
h1072	(on the 220-02 line		
b1073	terminal and on the 230		
	kV side of the #9		
	transformer)		PECO (100%)
b0829.2	Replace Whitpain 230 kV		
00029.2	breaker '525'	<u></u>	PECO (100%)
h0000 2	Replace Whitpain 230 kV		
b0829.3	breaker '175'	<u>l</u>	PECO (100%)
	Replace Plymouth		
b0829.4	Meeting 230 kV breaker		
	'225'		PECO (100%)
	Replace Plymouth		
b0829.5	Meeting 230 kV breaker		
	'335'		PECO (100%)
	Move the connection		
L00/11	points for the 2nd		
b0841	Plymouth Meeting		
	230/138 kV XFMR		PECO (100%)
	- · · · · · · · · · · · · · · · · · · ·		

<sup>\*</sup> Neptune Regional Transmission System, LLC
\*\*East Coast Power, L.L.C.

required 11		inuai Kevenue Kequiiemeni	responsible editioner(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 Eddistone 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required 11	ansimission Emancements A	illual 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC \*\*East Coast Power, L.L.C.

Required 11	ansmission Enhancements A	nnual 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%)

<sup>\*\*</sup>East Coast Power, L.L.C.

required 11	ansinission Elhancements Ai	iliuai Keveliue Kequilellielli	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 (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / 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 (3.05%) / 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC \*\*East Coast Power, L.L.C.

Required 11	ansinission Enhancements Ai	inuai Kevenue Kequiterneni	Responsible Customer(s)
b1717	Install a second Waneeta 230/138 kV transformer		HTP (0.04%) / PECO
01/1/	on a separate bus section		(99.96%)
	Reconductor the		(55.5670)
b1718	Crescentville - Foxchase		
01710	138 kV circuit		PECO (100%)
	Reconductor the		
b1719	Foxchase - Bluegrass 138		
	kV circuit		PECO (100%)
	Increase the effective		, ,
	rating of the Eddystone		
b1720	230/138 kV transformer		
	by replacing a circuit		
	breaker at Eddystone		PECO (100%)
	Increase the rating of the		
b1721	Waneeta - Tuna 138 kV		
01721	circuit by replacing two		
	138 kV CTs at Waneeta		PECO (100%)
	Increase the normal		
	rating of the Cedarbrook		
1.1700	- Whitemarsh 69 kV		
b1722	circuit by changing the		
	CT ratio and replacing station cable at		
	station cable at Whitemarsh 69 kV		PECO (100%)
	Install 39 MVAR		FECO (100%)
b1768	capacitor at Cromby 138		
01700	kV bus		PECO (100%)
			PECO (69.62%) / JCPL
	Add a 3rd 230 kV		(6.02%) / ATSI (1.23%) /
1.1000	transmission line between		PSEG (20.83%) / RE
b1900	Chichester and Linwood		(0.83%) / NEPTUNE*
	substations and remove		(0.59%) / ECP** (0.45%) /
	the Linwood SPS		HTP (0.43%)
b2140	Install a 3rd Emilie		PECO (97.04%) / ECP**
02140	230/138 kV transformer		(1.62%) / HTP (1.34%)
	Replace two sections of		
b2145	conductor inside		
	Richmond substation		PECO (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC \*\*East Coast Power, L.L.C.

<sup>\*\*\*</sup>Hudson Transmission Partners, LLC

#### **SCHEDULE 12 – APPENDIX**

#### (9) PPL Electric Utilities Corporation

Annual Revenue Requirement Responsible Customer(s) Required Transmission Enhancements Rebuild 12 miles of S. Akron - Berks 230 kV to double circuit, looping Met Ed's S. Lebanon – S. b0074 Reading line into Berks; replacement of S. Reading 230 kV breaker 107252 PPL (100%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Replace wavetrap at (2.65%) / Dominion (13.03%) / Hosensack 500kV EKPC (1.77%) / JCPL (3.84%) / b0171.2 substation to increase ME (1.93%) / NEPTUNE\* rating of Elroy -(0.45%) / OVEC (0.07%) / PECO Hosensack 500 kV (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** AEC (8.78%) / DPL (9.27%) / JCPL (19.92%) / PECO (62.03%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Required		Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
	Replace wave trap at	EKPC (1.77%) / JCPL (3.84%) /
b0172.1	Alburtis 500kV	ME (1.93%) / NEPTUNE*
	substation	(0.45%) / OVEC (0.07%) / PECO
		(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		AEC (8.09%) / JCPL (32.99%) /
		NEPTUNE (5.38%) / PSEG
		(51.49%) / RE (2.05%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
	Replace two wave traps	EKPC (1.77%) / JCPL (3.84%) /
	at Juniata 500 kV – on	ME (1.93%) / NEPTUNE*
b0284.2	the two Juniata –	(0.45%) / OVEC (0.07%) / PECO
	Airydale 500 kV	(5.29%) / PENELEC (1.89%) /
	All ydale 500 kV	PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		AEC (5.58%) / BGE (18.21%) /
		JCPL (18.24%) / ME (11.07%) /
		NEPTUNE (2.03%) / PECO
		(18.80%) / PSEG (25.07%) / RE
		(1.00%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Changes at Juniata 500 b0284.4 kV substation PPL (100%) Replace wavetrap at the b0293.1 Martins Creek 230 kV bus PPL (100%) Raise the operating temperature of the 2b0293.2 1590 ACSR to 140C for the Martins Creek -Portland 230 kV circuit PPL (100%) Spare Juniata 500/230 b0440 kV transformer PPL (100%) Build a new substation with two 150 MVA transformers between JCPL (4.55%) / Neptune\* Dauphin and (0.37%) / PECO (1.79%) / Hummelstown 230/69 b0468 PENELEC (0.33%) / PPL kV substations by (86.63%) / ECP\*\* (0.18%) / sectionalizing the PSEG (5.93%) / RE (0.22%) Middletown Junction -New Lebanon 230 kV line

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

<sup>\*\*\*</sup> Hudson Transmission Partners, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install 130 MVAR capacitor at West b0469 Shore 230 kV line PPL (100%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / Build new 500 kV transmission facilities EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE\* from Susquehanna to b0487 Pennsylvania – New (0.45%) / OVEC (0.07%) / Jersey border at PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL Bushkill (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** JCPL (33.79%) / NEPTUNE (4.36%) / PSEG (59.48%) / RE (2.37%)Install Lackawanna 500/230 kV PENELEC (16.90%) / PPL transformer and b0487.1 (77.59%) / ECP\*\* (0.19%) / upgrade 230 kV PSEG (5.13%) / RE (0.19%) substation and switchyard Conastone - Otter Creek 230 kV -AEC (6.27%) / DPL (8.65%) / Reconductor JCPL (14.54%) / ME (10.59%) / approximately 17.2 Neptune\* (1.37%) / PECO b0500.1 miles of 795 kcmil (15.66%) / PPL (21.02%) / ECP\*\* (0.57%) / PSEG ACSR with new 795 kcmil ACSS operated (20.56%) / RE (0.77%) at 160 deg C

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Install 250 MVAR (2.65%) / Dominion (13.03%) / b0558 capacitor at Juniata 500 EKPC (1.77%) / JCPL (3.84%) / kV substation ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) Eldred – Pine Grove 69 b0593 kV line Rebuild Part 2: 8 miles PPL (100%) Rebuild Lackawanna – b0595 Edella 69 kV line to double circuit PPL (100%) Reconductor and rebuild Stanton – Providence 69 kV #1 and #2 lines with b0596 69 kV design; approximately 8 miles total PPL (100%) Reconductor Suburban -Providence 69 kV #1 and b0597 resectionalize the Suburban 69 kV lines PPL (100%) Reconductor Suburban b0598 Taps #1 and #2 for 69 kV line portions PPL (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Tripp Park Substation: 69		
b0600	kV tap off Stanton –		
00000	Providence 69 kV line #3		
	to new substation		PPL (100%)
	Jessup Substation: New		
b0601	138/69 kV tap off of		
	Peckville – Jackson		DDI (1000)
	138/69 kV line		PPL (100%)
	Add 150 MVA,		
b0604	230/138/69 transformer		
	#6 to Harwood substation		PPL (100%)
	Reconductor Stanton –		
	Old Forge 69 kV line and		
b0605	resectionalize the Jenkins		
	<ul><li>Scranton 69 kV #1 and</li></ul>		
	#2 lines		PPL (100%)
	New 138 kV tap off		
b0606	Monroe – Jackson 138 kV		
00000	#1 line to Bartonsville		
	substation		PPL (100%)
	New 138 kV taps off		
b0607	Monroe – Jackson 138 kV		
00007	lines to Stroudsburg		
	substation		PPL (100%)
	New 138 kV tap off		
b0608	Siegfried – Jackson 138		
	kV #2 to transformer #2 at		<b>TT</b> (100)
	Gilbert substation		PPL (100%)
	At South Farmersville		
b0610	substation, a new 69 kV		
	tap off Nazareth – Quarry		DDI (1000()
	#2 to transformer #2		PPL (100%)
	Rebuild Siegfried – North		
b0612	Bethlehem portion (6.7		
	miles) of Siegfried –		DDI (1000/)
	Quarry 69 kV line		PPL (100%)
10512	East Tannersville		
b0613	Substation: New 138 kV		
	tap to new substation		PPL (100%)

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%)

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%)

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%)

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%)

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%)

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%)

Required T	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%)

Required T	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%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlertown #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%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Rebuild Lycoming-Lock Haven #1 and b1533 Lycoming-Lock Haven #2 69kV lines PPL (100%) Rebuild 1.4 miles of the Sunbury-Milton 69kV b1534 PPL (100%) AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / Re-configure the Breinigsville 500 kV DPL (2.65%) / Dominion substation with addition (13.03%) / EKPC (1.77%) / b1601 two 500 kV circuit JCPL (3.84%) / ME (1.93%) / NEPTUNE\* (0.45%) / OVEC breakers (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)† Re-configure the Elimsport 230 kV b1602 substation to breaker and half scheme and install 80 MVAR capacitor PPL (100%) Install a 90 MVAR cap b1740 bank on the Frackville 230 kV bus #207973 PPL (100%) Install a 3rd West Shore b1756 230/69 kV transformer PPL (100%) Install a 230 kV motoroperated air-break switch b1757 on the Clinton - Elimsport PPL (100%) 230 kV line

<sup>\*</sup> Neptune Regional Transmission System, LLC

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%)

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%)
ь1891	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%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace the CTs and switch in SAKR Bay 3 to increase the rating of the b2005 Millwood-South Akron 230 kV Line and of the PPL (100%) rating in Bay 3 AEC (1.10%) / ECP\*\* (0.37%) / HTP (0.37%) / JCPL **Install North Lancaster** (9.61%) / ME (19.42%) / b2006 500/230 kV substation Neptune\* (0.75%) / PECO (below 500 kV portion) (6.01%) / PPL (50.57%) / PSEG (11.35%) / RE (0.45%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / **Install North Lancaster** DPL (2.65%) / Dominion b2006.1 500/230 kV substation (13.03%) / EKPC (1.77%) / (500 kV portion) JCPL (3.84%) / ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** PPL (100%) Construct a new 230/69 kV North Lancaster substation. The sub will b2006.2 be supplied from the SAKR-BERK 230kV Line PPL (100%) Construct new 69/138 kV transmission from North b2006.3 Lancaster 230/69 kV sub to Brecknock and Honeybrook areas PPL (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup> East Coast Power, L.L.C.

<sup>\*\*\*</sup> Hudson Transmission Partners, LLC

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%)

#### **SCHEDULE 12 – APPENDIX**

#### (10) Potomac Electric Power Company

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

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / Reconductor circuit ME (1.16%) / Neptune\* (0.25%) "23033" for Dickerson – b0367.2 / PECO (4.79%) / PEPCO Quince Orchard 230 kV (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP\*\* (0.08%) Install 0.5% reactor at AEC (1.02%) / BGE (25.42%) / Dickerson on the Pleasant DPL (2.97%) / ME (1.72%) / b0375 View – Dickerson 230 kV PECO (3.47%) / PEPCO circuit (65.40%) AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / Reconductor the JCPL (0.71%) / ME (2.48%) / b0467.1 Dickerson – Pleasant Neptune\* (0.06%) / PECO View 230 kV circuit (5.54%) / PEPCO (41.86%) / PPL (2.07%) Reconductor the four b0478 circuits from Burches Hill APS (1.68%) / BGE (1.83%) / PEPCO (96.49%) to Palmers Corner Replace existing 500/230 APS (5.67%) / BGE (29.68%) / b0496 kV transformer at Dominion (10.91%) / PEPCO **Brighton** (53.74%) Install third Burches Hill APS (3.54%) / BGE (7.31%) / b0499 500/230 kV transformer PEPCO (89.15%)

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required'	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
		-	d-Ratio Share Allocation:
		AEG	C (1.71%) / AEP (14.04%) /
			S (5.61%) / ATSI (8.10%) /
			(4.36%) / ComEd (13.14%) /
			on (2.15%) / DEOK (3.23%) /
			L (1.73%) / DPL (2.65%) /
	3.64.DD D		ominion (13.03%) / EKPC
	MAPP Project – install	(1.	77%) / JCPL (3.84%) / ME
	new 500 kV transmission	(1.93	3%) / NEPTUNE* (0.45%) /
	from Possum Point to	OVE	C (0.07%) / PECO (5.29%) /
b0512	Calvert Cliffs and install a	PE	NELEC (1.89%) / PEPCO
	DC line from Calvert	(3.8	(2%) / PPL (4.72%) / PSEG
	Cliffs to Vienna and a DC		(6.21%) / RE (0.26%)
	line from Calvert Cliffs to		DFAX Allocation:
	Indian River	AE	C (3.94%) / APS (0.33%) /
		BGE	E (34.54%) / DPL (14.69%) /
		Domi	nion (0.30%) / JCPL (9.43%)
		/]	ME (2.16%) / NEPTUNE
		(0	.90%) / PECO (10.52%) /
		PEP	CO (2.44%) / PPL (5.50%) /
		PS	EG (14.71%) / RE (0.54%)
		Loa	d-Ratio Share Allocation:
		AEG	C (1.71%) / AEP (14.04%) /
		APS	S (5.61%) / ATSI (8.10%) /
			(4.36%) / ComEd (13.14%) /
		Dayto	on (2.15%) / DEOK (3.23%) /
		DI	L (1.73%) / DPL (2.65%) /
			ominion (13.03%) / EKPC
	Advance n0772 (Replace	`	77%) / JCPL (3.84%) / ME
		(1.93	3%) / NEPTUNE* (0.45%) /
	Chalk Point 230 kV		C (0.07%) / PECO (5.29%) /
b0512.7	breaker (1A) with 80 kA		NELEC (1.89%) / PEPCO
	breaker)	(3.8	(2%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			C (3.94%) / APS (0.33%) /
			E (34.54%) / DPL (14.69%) /
			nion (0.30%) / JCPL (9.43%)
		/]	ME (2.16%) / NEPTUNE
		(0	.90%) / PECO (10.52%) /
		PEP	CO (2.44%) / PPL (5.50%) /
		PS	EG (14.71%) / RE (0.54%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 7	Transmission Enhancements	Annual Revenue Requireme	ent Responsible Customer(s)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
		E	BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
			Dominion (13.03%) / EKPC
			(1.77%) / JCPL (3.84%) / ME
	Advance n0773 (Replace		(1.93%) / NEPTUNE* (0.45%) /
	Chalk Point 230 kV		OVEC (0.07%) / PECO (5.29%) /
b0512.8	breaker (1B) with 80 kA		PENELEC (1.89%) / PEPCO
	breaker)		(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
		l l	3GE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
			Dominion (13.03%) / EKPC
			(1.77%) / JCPL (3.84%) / ME
	Advance n0774 (Replace	l l	(1.93%) / NEPTUNE* (0.45%) /
	Chalk Point 230 kV		OVEC (0.07%) / PECO (5.29%) /
b0512.9	breaker (2A) with 80 kA		PENELEC (1.89%) / PEPCO
	breaker)		(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
b0512.10	Advance n0775 (Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker)	Load-Ratio Share Allocation:  AEC (1.71%) / AEP (14.04%) /  APS (5.61%) / ATSI (8.10%) /  BGE (4.36%) / ComEd (13.14%) /  Dayton (2.15%) / DEOK (3.23%) /  DL (1.73%) / DPL (2.65%) /  Dominion (13.03%) / EKPC  (1.77%) / JCPL (3.84%) / ME  (1.93%) / NEPTUNE* (0.45%) /  OVEC (0.07%) / PECO (5.29%) /  PENELEC (1.89%) / PEPCO  (3.82%) / PPL (4.72%) / PSEG  (6.21%) / RE (0.26%)  DFAX Allocation:  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)	Load-Ratio Share Allocation:  AEC (1.71%) / AEP (14.04%) /  APS (5.61%) / ATSI (8.10%) /  BGE (4.36%) / ComEd (13.14%) /  Dayton (2.15%) / DEOK (3.23%) /  DL (1.73%) / DPL (2.65%) /  Dominion (13.03%) / EKPC  (1.77%) / JCPL (3.84%) / ME  (1.93%) / NEPTUNE* (0.45%) /  OVEC (0.07%) / PECO (5.29%) /  PENELEC (1.89%) / PEPCO  (3.82%) / PPL (4.72%) / PSEG  (6.21%) / RE (0.26%)  DFAX Allocation:  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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements		Annual Revenue Requirement Responsible Customer(s)
b0512.12	Advance n0777 (Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker)	Load-Ratio Share Allocation:  AEC (1.71%) / AEP (14.04%) /  APS (5.61%) / ATSI (8.10%) /  BGE (4.36%) / ComEd (13.14%) /  Dayton (2.15%) / DEOK (3.23%) /  DL (1.73%) / DPL (2.65%) /  Dominion (13.03%) / EKPC  (1.77%) / JCPL (3.84%) / ME  (1.93%) / NEPTUNE* (0.45%) /  OVEC (0.07%) / PECO (5.29%) /  PENELEC (1.89%) / PEPCO  (3.82%) / PPL (4.72%) / PSEG  (6.21%) / RE (0.26%)  DFAX Allocation:  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)	Load-Ratio Share Allocation:  AEC (1.71%) / AEP (14.04%) /  APS (5.61%) / ATSI (8.10%) /  BGE (4.36%) / ComEd (13.14%) /  Dayton (2.15%) / DEOK (3.23%) /  DL (1.73%) / DPL (2.65%) /  Dominion (13.03%) / EKPC  (1.77%) / JCPL (3.84%) / ME  (1.93%) / NEPTUNE* (0.45%) /  OVEC (0.07%) / PECO (5.29%) /  PENELEC (1.89%) / PEPCO  (3.82%) / PPL (4.72%) / PSEG  (6.21%) / RE (0.26%)  DFAX Allocation:  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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		AEC (1.71%) / AEF (14.04%) / APS (5.61%) / ATSI (8.10%) /
		` ' ' ' ' '
		BGE (4.36%) / ComEd (13.14%) /
		Dayton (2.15%) / DEOK (3.23%) /
		DL (1.73%) / DPL (2.65%) /
		Dominion (13.03%) / EKPC
		(1.77%) / JCPL (3.84%) / ME
	Advance n0779 (Replace	(1.93%) / NEPTUNE* (0.45%) /
1.0510.14	Chalk Point 230 kV	OVEC (0.07%) / PECO (5.29%) /
b0512.14	breaker (3C) with 80 kA	PENELEC (1.89%) / PEPCO
	breaker)	(3.82%) / PPL (4.72%) / PSEG
	,	(6.21%) / RE (0.26%)
		DFAX Allocation:
		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%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) /
		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) /
		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) /
		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) /
		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC
		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME
	Advance n0780 (Replace	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) /
	Advance n0780 (Replace Chalk Point 230 kV	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) /
b0512.15	Chalk Point 230 kV	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO
b0512.15	Chalk Point 230 kV breaker (4A) with 80 kA	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG
b0512.15	Chalk Point 230 kV	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)
b0512.15	Chalk Point 230 kV breaker (4A) with 80 kA	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) <b>DFAX Allocation:</b>
b0512.15	Chalk Point 230 kV breaker (4A) with 80 kA	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) /
b0512.15	Chalk Point 230 kV breaker (4A) with 80 kA	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) /
b0512.15	Chalk Point 230 kV breaker (4A) with 80 kA	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)
b0512.15	Chalk Point 230 kV breaker (4A) with 80 kA	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE
b0512.15	Chalk Point 230 kV breaker (4A) with 80 kA	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: 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%) /
b0512.15	Chalk Point 230 kV breaker (4A) with 80 kA	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirem	nent Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
			Dominion (13.03%) / EKPC
			(1.77%) / JCPL (3.84%) / ME
	Advance n0792 (Benlese		(1.93%) / NEPTUNE* (0.45%) /
	Advance n0783 (Replace		OVEC (0.07%) / PECO (5.29%) /
b0512.18	Chalk Point 230 kV		PENELEC (1.89%) / PEPCO
	breaker (5B) with 80 kA		(3.82%) / PPL (4.72%) / PSEG
	breaker)		(6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)
	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)		<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%) /
		1	Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
			Dominion (13.03%) / EKPC
			(1.77%) / JCPL (3.84%) / ME
			(1.93%) / NEPTUNE* (0.45%) /
			OVEC (0.07%) / PECO (5.29%) /
b0512.19			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
		_	(6.21%) / RE (0.26%)
			DFAX Allocation:
			AEC (3.94%) / APS (0.33%) /
			BGE (34.54%) / DPL (14.69%) /
		1	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

	ransmission Ennancements – A	Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		AEC (1.71%) / AEF (14.04%) / APS (5.61%) / ATSI (8.10%) /
		` ' '
		BGE (4.36%) / ComEd (13.14%) /
		Dayton (2.15%) / DEOK (3.23%) /
		DL (1.73%) / DPL (2.65%) /
		Dominion (13.03%) / EKPC
		(1.77%) / JCPL (3.84%) / ME
	Advance n0785 (Replace	(1.93%) / NEPTUNE* (0.45%) /
1.0512.20	Chalk Point 230 kV	OVEC (0.07%) / PECO (5.29%) /
b0512.20	breaker (6B) with 80 kA	PENELEC (1.89%) / PEPCO
	breaker	(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)
		DFAX Allocation:
		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%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%) /
		Dayton (2.15%) / DEOK (3.23%) /
		DL (1.73%) / DPL (2.65%) /
		DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC
		DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME
	Advance n0786 (Replace	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) /
	Advance n0786 (Replace Chalk Point 230 kV	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) /
b0512.21	Chalk Point 230 kV	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO
b0512.21	Chalk Point 230 kV breaker (7B) with 80 kA	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG
b0512.21	Chalk Point 230 kV	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)
b0512.21	Chalk Point 230 kV breaker (7B) with 80 kA	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation:
b0512.21	Chalk Point 230 kV breaker (7B) with 80 kA	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) /
b0512.21	Chalk Point 230 kV breaker (7B) with 80 kA	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) /
b0512.21	Chalk Point 230 kV breaker (7B) with 80 kA	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%)
b0512.21	Chalk Point 230 kV breaker (7B) with 80 kA	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE
b0512.21	Chalk Point 230 kV breaker (7B) with 80 kA	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: 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%) /
b0512.21	Chalk Point 230 kV breaker (7B) with 80 kA	DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (3.94%) / APS (0.33%) / BGE (34.54%) / DPL (14.69%) / Dominion (0.30%) / JCPL (9.43%) / ME (2.16%) / NEPTUNE

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirem	-
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
	A december 20797 (December 20		Dominion (13.03%) / EKPC
			(1.77%) / JCPL (3.84%) / ME
			(1.93%) / NEPTUNE* (0.45%) /
	Advance n0787 (Replace Chalk Point 230 kV		OVEC (0.07%) / PECO (5.29%) /
b0512.22	breaker (8A) with 80 kA		PENELEC (1.89%) / PEPCO
	breaker)		(3.82%) / PPL (4.72%) / PSEG
	bleakel)		(6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)
	Advance n0788 (Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker)		Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
			Dominion (13.03%) / EKPC
			(1.77%) / JCPL (3.84%) / ME
			(1.93%) / NEPTUNE* (0.45%) /
			OVEC (0.07%) / PECO (5.29%) /
b0512.23			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
		_	(6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirem	nent Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
			Dominion (13.03%) / EKPC
			(1.77%) / JCPL (3.84%) / ME
	Advance n0789 (Replace		(1.93%) / NEPTUNE* (0.45%) /
	Chalk Point 230 kV		OVEC (0.07%) / PECO (5.29%) /
b0512.24	breaker (7A) with 80 kA		PENELEC (1.89%) / PEPCO
	breaker)		(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)
			Load-Ratio Share Allocation:
	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)		AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%) /
		]	Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
			Dominion (13.03%) / EKPC
			(1.77%) / JCPL (3.84%) / ME
			(1.93%) / NEPTUNE* (0.45%) /
			OVEC (0.07%) / PECO (5.29%) /
b0512.25			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirem	ment Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
			Dominion (13.03%) / EKPC
			(1.77%) / JCPL (3.84%) / ME
	Advance n0791 (Replace		(1.93%) / NEPTUNE* (0.45%) /
	Chalk Point 230 Kv		OVEC (0.07%) / PECO (5.29%) /
b0512.26	breaker (4C) with 80 kA		PENELEC (1.89%) / PEPCO
	breaker)		(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)		DL (1.73%) / DPL (2.65%) /
			Dominion (13.03%) / EKPC
			(1.77%) / JCPL (3.84%) / ME
			(1.93%) / NEPTUNE* (0.45%) /
1.0510.07			OVEC (0.07%) / PECO (5.29%) /
b0512.27			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
		_	(6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%) /
		Dayton (2.15%) / DEOK (3.23%) /
		DL (1.73%) / DPL (2.65%) /
		Dominion (13.03%) / EKPC
		(1.77%) / JCPL (3.84%) / ME
	Advance n0793 (Replace	(1.93%) / NEPTUNE* (0.45%) /
	Chalk Point 230 Kv	OVEC (0.07%) / PECO (5.29%) /
b0512.28	breaker (6C) with 80 kA	PENELEC (1.89%) / PEPCO
	breaker)	(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)
		DFAX Allocation:
		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%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%) /
		Dayton (2.15%) / DEOK (3.23%) /
		DL (1.73%) / DPL (2.65%) /
		Dominion (13.03%) / EKPC
		(1.77%) / JCPL (3.84%) / ME
	Advance n0794 (Replace	(1.93%) / NEPTUNE* (0.45%) /
	Chalk Point 230 Kv	OVEC (0.07%) / PECO (5.29%) /
b0512.29	breaker (7C) with 80 kA	PENELEC (1.89%) / PEPCO
	breaker)	(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)
		DFAX Allocation:
		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%)
	oreaker)	(6.21%) / 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%) /

<sup>\*</sup> Neptune Regional Transmission System, LLC

required	Tarishinssion Edinancements	Affilial 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%)

Required	Talishiission Elinancements	Annual Revenue Requireme	in Responsible Customer(s)
	Expand Benning 230 kV		
b0701	station, add a new 250		
	MVA 230/69 kV		
00701	transformer at Benning		
	Station 'A', new 115 kV		
	Benning switching station		BGE (30.57%) / PEPCO (69.43%)
	Add a second 50 MVAR		
1-0702	230 kV shunt reactor at		
b0702	the Benning 230 kV		
	substation		PEPCO (100%)
b0720	Upgrade terminal		
00720	equipment on both lines		PEPCO (100%)
	Upgrade Oak Grove –		
b0721	Ritchie 23061 230 kV		
	line		PEPCO (100%)
	Upgrade Oak Grove –		
b0722	Ritchie 23058 230 kV		
	line		PEPCO (100%)
	Upgrade Oak Grove –		
b0723	Ritchie 23059 230 kV		
	line		PEPCO (100%)
	Upgrade Oak Grove –		
b0724	Ritchie 23060 230 kV		
	line		PEPCO (100%)
	Add slow oil circulation		
	to the four Bells Mill		
	Road – Bethesda 138 kV		
	lines, add slow oil		
	circulation to the two		
1.0720	Buzzard Point –		
b0730	Southwest 138 kV lines;		
	increasing the thermal		
	ratings of these six lines		
	allows for greater		
	adjustment of the O Street		
	phase shifters		PEPCO (100%)
L		1	` ,

<sup>\*</sup> Neptune Regional Transmission System, LLC

		1	Tesponsione editionier(s)
	Implement an SPS to		
	automatically shed load		
	on the 34 kV Bells Mill		
	Road bus for this N-2		
b0731	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%)
	Upgrade circuit for 3,000		AEC (0.73%) / BGE (31.05%) /
b0746	amps using the ACCR		DPL (1.45%) / PECO (2.46%) /
	amps using the ACCK		PEPCO (62.88%) / PPL (1.43%)
	Upgrade terminal		
	equipment on both lines:		
b0747	Quince Orchard - Bells		
	Mill 230 kV (030) and		
	(028)		PEPCO (100%)
	Advance n0259 (Replace		
b0802	Dickerson Station H		
	Circuit Breaker 412A)		PEPCO (100%)
	Advance n0260 (Replace		
b0803	Dickerson Station H		
	Circuit Breaker 42A)		PEPCO (100%)
	Advance n0261 (Replace		
b0804	Dickerson Station H		
	Circuit Breaker 42C)		PEPCO (100%)
b0805	Advance n0262 (Replace		
	Dickerson Station H		
	Circuit Breaker 43A)		PEPCO (100%)
	Advance n0264 (Replace		
b0806	Dickerson Station H		
	Circuit Breaker 44A)		PEPCO (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Advance n0267 (Replace Dickerson Station H Circuit Breaker 45B) PEPCO (100%)  Advance n0270 (Replace Dickerson Station H Circuit Breaker 47A) PEPCO (100%)  Advance n0726 (Replace Dickerson Station H PEPCO (100%)  Replace Chalk Point 230 K breaker (1A) with 80 K A breaker PARE PEPCO (100%)  Replace Chalk Point 230 KV breaker (1B) with 80 KA breaker PEPCO (100%)  Replace Chalk Point 230 KV breaker (2A) with 80 KA breaker PEPCO (100%)  Replace Chalk Point 230 KV breaker (2B) with 80 KA breaker PEPCO (100%)  Replace Chalk Point 230 KV breaker (2B) with 80 KA breaker PEPCO (100%)  Replace Chalk Point 230 KV breaker (2C) with 80 KA breaker PEPCO (100%)  Replace Chalk Point 230 KV breaker (3A) with 80 KV breaker (3A) with 80 KV breaker (3B) with 8	Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
Circuit Breaker 45B)		Advance n0267 (Replace		
Advance n0270 (Replace   Dickerson Station H   Circuit Breaker 47A)	b0809	Dickerson Station H		
Dickerson Station H		Circuit Breaker 45B)		PEPCO (100%)
Circuit Breaker 47A)		Advance n0270 (Replace		
Advance n0726 (Replace   Dickerson Station H   Circuit Breaker SPARE   PEPCO (100%)	b0810	Dickerson Station H		
Dickerson Station H		Circuit Breaker 47A)		PEPCO (100%)
Circuit Breaker SPARE   PEPCO (100%)		Advance n0726 (Replace		
Replace Chalk Point 230	b0811	Dickerson Station H		
B0845		Circuit Breaker SPARE)		PEPCO (100%)
Replace Chalk Point 230		Replace Chalk Point 230		
Replace Chalk Point 230   kV breaker (1B) with 80   kA breaker   PEPCO (100%)	b0845	kV breaker (1A) with 80		
Bo846		kA breaker		PEPCO (100%)
Replace Chalk Point 230		Replace Chalk Point 230		
Replace Chalk Point 230	b0846	kV breaker (1B) with 80		
Bolate		kA breaker		PEPCO (100%)
Replace Chalk Point 230		Replace Chalk Point 230		
Replace Chalk Point 230	b0847	kV breaker (2A) with 80		
b0848 kV breaker (2B) with 80		kA breaker		PEPCO (100%)
Replace Chalk Point 230		Replace Chalk Point 230		
Replace Chalk Point 230   kV breaker (2C) with 80   kA breaker   PEPCO (100%)	b0848	kV breaker (2B) with 80		
b0849 kV breaker (2C) with 80		kA breaker		PEPCO (100%)
Replace Chalk Point 230		Replace Chalk Point 230		
Replace Chalk Point 230   kV breaker (3A) with 80   kA breaker   PEPCO (100%)	b0849	kV breaker (2C) with 80		
Bobbasia		kA breaker		PEPCO (100%)
Replace Chalk Point 230		Replace Chalk Point 230		
Replace Chalk Point 230   kV breaker (3B) with 80   kA breaker   PEPCO (100%)	b0850	kV breaker (3A) with 80		
b0851		kA breaker		PEPCO (100%)
Replace Chalk Point 230		Replace Chalk Point 230		
Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker  Replace Chalk Point 230 b0853 kV breaker (4A) with 80 kA breaker  Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker  Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker  Replace Chalk Point 230 kV breaker (5A) with 80	b0851	kV breaker (3B) with 80		
b0852 kV breaker (3C) with 80		kA breaker		PEPCO (100%)
kA breaker       PEPCO (100%)         Replace Chalk Point 230       kV breaker (4A) with 80         kA breaker       PEPCO (100%)         Replace Chalk Point 230       kV breaker (4B) with 80         kA breaker       PEPCO (100%)         Replace Chalk Point 230       PEPCO (100%)         kV breaker (5A) with 80       Replace Chalk Point 230	b0852	Replace Chalk Point 230		
Replace Chalk Point 230   kV breaker (4A) with 80   kA breaker   PEPCO (100%)		kV breaker (3C) with 80		
b0853 kV breaker (4A) with 80 kA breaker PEPCO (100%)  Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker PEPCO (100%)  Replace Chalk Point 230 kV breaker (5A) with 80		kA breaker		PEPCO (100%)
kA breaker       PEPCO (100%)         Replace Chalk Point 230       kV breaker (4B) with 80         kA breaker       PEPCO (100%)         Replace Chalk Point 230       PEPCO (100%)         kV breaker (5A) with 80       PEPCO (100%)	b0853	Replace Chalk Point 230		
Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker  Replace Chalk Point 230 b0855 kV breaker (5A) with 80		, ,		
b0854 kV breaker (4B) with 80 kA breaker PEPCO (100%)  Replace Chalk Point 230 kV breaker (5A) with 80		kA breaker		PEPCO (100%)
kA breaker PEPCO (100%)  Replace Chalk Point 230 kV breaker (5A) with 80	b0854	Replace Chalk Point 230		
Replace Chalk Point 230 b0855 kV breaker (5A) with 80		3 6		
b0855 kV breaker (5A) with 80		kA breaker		PEPCO (100%)
		Replace Chalk Point 230		
kA breaker PEPCO (100%)	b0855	* *		
		kA breaker		PEPCO (100%)

Required Transmission Enhancements		Annual Revenue Requiremen	nt Responsible Customer(s)
	Replace Chalk Point 230		
b0856	kV breaker (5B) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		
b0857	kV breaker (6A) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		, ,
b0858	kV breaker (6B) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		
b0859	kV breaker (7B) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		
b0860	kV breaker (8A) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		,
b0861	kV breaker (8B) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		· · · · · · · · · · · · · · · · · · ·
b0862	kV breaker (7A) with 80		
	kA breaker		PEPCO (100%)
	Replace Chalk Point 230		
b0863	kV breaker (1C) with 80		
	kA breaker		PEPCO (100%)
1.110.4	Replace Burtonsville 230		,
b1104	kV breaker '1C'		PEPCO (100%)
1.1105	Replace Burtonsville 230		
b1105	kV breaker '2C'		PEPCO (100%)
1.1106	Replace Burtonsville 230		
b1106	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	Al	PS (4.74%) / PEPCO (95.26%)
b1126	Upgrade the 230 kV line		
	from Buzzard 016 –		
	Ritchie 059	Al	PS (4.74%) / PEPCO (95.26%)

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

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		AEC (1.44%) / BGE (48.60%) /
	and Aquasco 230 kV		DPL (2.52%) / PECO (5.00%) /
	substations		PEPCO (42.44%)
	Reconductor feeder 23032		BGE (33.05%) / DPL (1.38%) /
b2008	and 23034 to high temp.		PECO (1.35%) / PEPCO
	conductor (10 miles)		(64.22%) /
b2136	Reconductor the		
	Morgantown - V3-017		
	230 kV '23086' circuit and		
02130	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) Convert the Bergen-Leonia 138 Kv circuit to b0025 230 kV circuit. PSEG (100%) Add 150 MVAR capacitor b0090 at Camden 230 kV PSEG (100%) Add 150 MVAR capacitor b0121 at Aldene 230 kV PSEG (100%) Bypass the Essex 138 kV b0122 series reactors PSEG (100%) Add Special Protection Scheme at Bridgewater to automatically open 230 kV breaker for outage of Branchburg – Deans 500 kV and Deans 500/230 kV b0125 #1 transformer PSEG (100%) Replace wavetrap Branchburg - Flagtown 230 kV b0126 PSEG (100%) Replace terminal equipment to increase Brunswick - Adams -Bennetts Lane 230 kV to b0127 conductor rating PSEG (100%) Replace wavetrap Flagtown - Somerville b0129 230 kV PSEG (100%) Replace all derated Branchburg 500/230 kV AEC (1.36%) / JCPL (47.76%) / b0130 transformers PSEG (50.88%) Upgrade or Retension **PSEG** portion Kittatinny – Newton 230 JCPL (51.11%) / PSEG **kVcircuit** (45.96%) / RE (2.93%) b0134

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) Build new Essex - Aldene 230 kV cable connected through a phase angle PSEG (21.78%) / JCPL b0145 regulator at Essex (73.45%) /RE (4.77%) Add 100MVAR capacitor PSEG (100%) at West Orange 138kV substation b0157 Close the Sunnymeade PSEG (100%) "C" and "F" bus tie b0158 Make the Bayonne reactor PSEG (100%) b0159 permanent installation Relocate the X-2250 PSEG (100%) circuit from Hudson 1-6 b0160 bus to Hudson 7-12 bus 230/138kV PSEG (99.80%) / RE (0.20%) Install transformer at Metuchen b0161 substation Upgrade the Edison – PSEG (100%) Meadow Rd 138kV "Q" b0162 circuit Upgrade the Edison – PSEG (100%) Meadow Rd 138kV "R" b0163 circuit Build a new 230 kV section from Branchburg Flagtown and move the b0169 AEC (1.72%) / JCPL (25.94%) Flagtown – Somerville 230 kV circuit to the new / Neptune\* (10.62%) / PSEG (59.59%) / ECP\*\* (2.13%) section Reconductor the JCLP (42.95%) / Neptune\* Flagtown-Somervilleb0170 Bridgewater (17.90%) / PSEG (38.36%) RE 230 kV

(0.79%)

circuit with 1590 ACSS

\* Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / Replace wave trap at JCPL (3.84%) / ME (1.93%) / Branchburg 500kV b0172.2 NEPTUNE\* (0.45%) / OVEC substation (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** AEC (8.09%) / JCPL (32.99%) / NEPTUNE (5.38%) / PSEG (51.49%) / RE (2.05%) PSEG (100%) Replace Hudson 230kV b0184 circuit breakers #1-2 PSEG (100%) Replace Deans 230kV circuit breakers #9-10 b0185 PSEG (100%) Replace Essex 230kV b0186 circuit breaker #5-6 Install 230/138 kV PENELEC (16.52%) / PSEG transformer at Bergen (80.29%) / RE (3.19%) substation b1082

<sup>\*</sup> Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Branchburg substation: replace wave trap on b0201 Branchburg Readington 230 kV circuit PSEG (100%) Replace New Freedom b0213.1 230 kV breaker BS2-6 PSEG (100%) Replace New Freedom b0213.3 230 kV breaker BS2-8 PSEG (100%) Replace both 230/138 kV b0274 transformers at Roseland PSEG (96.77%) / ECP\*\* (3.23%) Upgrade the two 138 kV circuits between b0275 Roseland and West Orange PSEG (100%) Install 228 **MVAR** capacitor at b0278 Roseland 230 kV substation PSEG (100%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / Install 400 **MVAR** EKPC (1.77%) / JCPL (3.84%) / capacitor in the b0290 ME (1.93%) / NEPTUNE\* Branchburg 500 kV (0.45%) / OVEC (0.07%) / PECO vicinity (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** AEC (8.09%) / JCPL (32.99%) / NEPTUNE (5.38%) / PSEG (51.49%) / RE (2.05%) Reconductor the PSEG portion of Buckingham b0358 Pleasant Valley 230 kV, replace wave trap and metering transformer PSEG (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor Tosco –		
b0368	G22_MTX 230 kV circuit		
	with 1033 bundled ACSS		PSEG (100%)
	Make the Metuchen 138		
1.0271	kV bus solid and upgrade 6		
b0371	breakers at the Metuchen		
	substation		PSEG (100%)
	Make the Athenia 138 kV		
	bus solid and upgrade 2		
	breakers at the Athenia		
b0372	substation		PSEG (100%)
	D1 H1 220 l-W		
1-0205	Replace Hudson 230 kV breaker BS4-5		DSEC (100%)
b0395	breaker BS4-3		PSEG (100%)
	Replace Hudson 230 kV		
b0396	breaker BS1-6		PSEG (100%)
	D1 H1 220 l-W		
L0207	Replace Hudson 230 kV breaker BS3-4		DSEC (100%)
b0397	breaker BS3-4		PSEG (100%)
	Replace Hudson 230 kV		
b0398	breaker BS5-6		PSEG (100%)
	Danlaga Dagaland 220 kW		
b0401.1	Replace Roseland 230 kV breaker BS6-7		DSEC (100%)
00401.1	breaker BS0-7		PSEG (100%)
	Replace Roseland 138 kV		
b0401.2	breaker O-1315		PSEG (100%)
	D1 D1 1 120 1-W		
b0401.2	Replace Roseland 138 kV breaker S-1319		DSEC (1000/)
b0401.3	breaker S-1319		PSEG (100%)
	Replace Roseland 138 kV		
b0401.4	breaker T-1320		PSEG (100%)
	Danlaga Dagal- :: 1 120 137		
b0401 5	Replace Roseland 138 kV		DSEC (100%)
b0401.5	breaker G-1307		PSEG (100%)
	Replace Roseland 138 kV		
b0401.6	breaker P-1316		PSEG (100%)
	Danlage Dagel 1 120 1 W		
h0401.7	Replace Roseland 138 kV		DSEC (100%)
b0401.7	breaker 220-4		PSEG (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace W. Orange 138 b0401.8 kV breaker 132-4 PSEG (100%) 4<sup>th</sup> Install 500/230 kV AEC (47.01%) / JCPL (7.04%) / Neptune\* (0.28%) / PECO transformer at New b0411 Freedom (23.36%) / PSEG (22.31%) Reconductor Readington (2555)Branchburg b0423 (4962) 230 kV circuit w/1590 ACSS PSEG (100%) Replace Readington wavetrap on Readington b0424 (2555) - Roseland (5017) 230 kV circuit PSEG (100%) Reconductor Linden (4996) - Tosco (5190) 230 kV circuit w/1590 ACSS (Assumes operating at 220 b0425 degrees C) PSEG (100%) Reconductor Tosco (5190) - G22 MTX5 (90220) 230 kV circuit w/1590 ACSS (Assumes operation at 220 b0426 degrees C) PSEG (100%) Reconductor Athenia (4954) – Saddle Brook (5020) 230 kV circuit river b0427 section PSEG (100%) Replace Roseland wavetrap Roseland on (5019) - West Caldwell b0428 "G" (5089) 138 kV circuit PSEG (100%) Reconductor **Kittatinny** (2553) – Newton (2535)JCPL (41.91%) / Neptune\* b0429 230 kV circuit w/1590 (3.59%) / PSEG (50.59%) / RE (2.23%) / ECP\*\* (1.68%) **ACSS** Spare Deans 500/230 kV transformer b0439 PSEG (100%) Upgrade Bayway 138 kV breaker #2-3 b0446.1 PSEG (100%) Upgrade Bayway 138 kV breaker #3-4 b0446.2 PSEG (100%) Upgrade Bayway 138 kV breaker #6-7 b0446.3 PSEG (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Upgrade the breaker associated with TX 132-5 on Linden 138 kV b0446.4 PSEG (100%) Install 138 kV breaker at Roseland and close b0470 the Roseland 138 kV buses PSEG (100%) Replace the wave traps at both Lawrence and b0471 Pleasant Valley on the Lawrence - Pleasant Vallen 230 kV circuit PSEG (100%) Increase the emergency rating of Saddle Brook b0472 Athenia 230 kV by 25% by adding forced ECP (2.06%) / PSEG (94.41%) / cooling RE (3.53%) Move the 150 MVAR mobile capacitor from b0473 Aldene 230 kV to Lawrence 230 kV substation PSEG (100%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Build new 500 kV (2.65%) / Dominion (13.03%) / transmission facilities EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE\* b0489 from Pennsylvania New Jersey border at (0.45%) / OVEC (0.07%) / PECO Bushkill to Roseland (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)† **DFAX Allocation:** JCPL (39.48%) / NEPTUNE (4.03%) / PSEG (54.33%) / RE (2.16%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.LC.

<sup>†</sup>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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Athenia 230 kV b489.1 breaker 31H PSEG (100%) Replace Bergen 230 kV b489.2 breaker 10H PSEG (100%) Replace Saddlebrook 230 b489.3 kV breaker 21P PSEG (100%) AEC (5.09%) / ComEd (0.29%) / Dayton (0.03%) / DPL (1.76%) Install Roseland two / JCPL (32.73%) / Neptune\* 500/230 kV transformers b0489.4 (6.32%) / PECO (10.04%) / as part of the Susquehanna PENELEC (0.56%) / ECP\*\* - Roseland 500 kV project (0.95%) / PSEG (40.71%) / RE (1.52%) †† **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / Replace Roseland 230 kV ME (1.93%) / NEPTUNE\* b0489.5 breaker '42H' with 80 kA (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** JCPL (39.48%) / NEPTUNE (4.03%) / PSEG (54.33%) / RE (2.16%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / Replace Roseland 230 kV ME (1.93%) / NEPTUNE\* b0489.6 breaker '51H' with 80 kA (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** JCPL (39.48%) / NEPTUNE (4.03%) / PSEG (54.33%) / RE (2.16%)**Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / Replace Roseland 230 kV ME (1.93%) / NEPTUNE\* b0489.7 breaker '71H' with 80 kA (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** JCPL (39.48%) / NEPTUNE (4.03%) / PSEG (54.33%) / RE (2.16%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirer	ment Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
			EKPC (1.77%) / JCPL (3.84%) /
b0489.8	Replace Roseland 230 kV		ME (1.93%) / NEPTUNE*
00489.8	breaker '31H' with 80 kA		(0.45%) / OVEC (0.07%) /
			PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			JCPL (39.48%) / NEPTUNE
			(4.03%) / PSEG (54.33%) / RE
			(2.16%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements		Annual Revenue Requireme	ent Responsible Customer(s)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
	Replace Roseland 230		EKPC (1.77%) / JCPL (3.84%) /
b0489.9	kV breaker '11H' with		ME (1.93%) / NEPTUNE*
00409.9	80 kA		(0.45%) / OVEC (0.07%) /
	80 KA		PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			JCPL (39.48%) / NEPTUNE
			(4.03%) / PSEG (54.33%) / RE
			(2.16%)
			<b>Load-Ratio Share Allocation:</b>
	Replace Roseland 230		AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
			EKPC (1.77%) / JCPL (3.84%) /
b0489.10			ME (1.93%) / NEPTUNE*
00407.10	kV breaker '21H'		(0.45%) / OVEC (0.07%) /
			PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			JCPL (39.48%) / NEPTUNE
			(4.03%) / PSEG (54.33%) / RE
			(2.16%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Tra	ansmission Enhancements	Annual Revenue Requireme	nt Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
			EKPC (1.77%) / JCPL (3.84%) /
b0489.11	Replace Roseland 230		ME (1.93%) / NEPTUNE*
00489.11	kV breaker '32H'		(0.45%) / OVEC (0.07%) /
			PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			JCPL (39.48%) / NEPTUNE
			(4.03%) / PSEG (54.33%) / RE
			(2.16%)
	Replace Roseland 230		Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
			EKPC (1.77%) / JCPL (3.84%) /
b0489.12			ME (1.93%) / NEPTUNE*
00469.12	kV breaker '12H'		(0.45%) / OVEC (0.07%) /
			PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			JCPL (39.48%) / NEPTUNE
			(4.03%) / PSEG (54.33%) / RE
			(2.16%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements		Annual Revenue Requireme	nt Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
			EKPC (1.77%) / JCPL (3.84%) /
b0489.13	Replace Roseland 230		ME (1.93%) / NEPTUNE*
00469.13	kV breaker '52H'		(0.45%) / OVEC (0.07%) /
			PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			<b>DFAX Allocation:</b>
			JCPL (39.48%) / NEPTUNE
			(4.03%) / PSEG (54.33%) / RE
			(2.16%)
	Replace Roseland 230		Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
			EKPC (1.77%) / JCPL (3.84%) /
b0489.14			ME (1.93%) / NEPTUNE*
00407.14	kV breaker '41H'		(0.45%) / OVEC (0.07%) /
			PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			JCPL (39.48%) / NEPTUNE
			(4.03%) / PSEG (54.33%) / RE
			(2.16%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / Replace Roseland 230 kV ME (1.93%) / NEPTUNE\* b0489.15 breaker '72H' (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** JCPL (39.48%) / NEPTUNE (4.03%) / PSEG (54.33%) / RE (2.16%)**Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE\* Loop the 5021 circuit into b0498 New Freedom 500 kV (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC substation (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** AEC (13.46%) / JCPL (25.00%) / NEPTUNE (2.97%) / PECO (17.71%) / PSEG (39.30%) / RE (1.56%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Upgrade the 20H circuit b0498.1 breaker PSEG (100%) Upgrade the 22H circuit b0498.2 breaker PSEG (100%) Upgrade the 30H circuit b0498.3 breaker PSEG (100%) Upgrade the 32H circuit b0498.4 breaker PSEG (100%) Upgrade the 40H circuit b0498.5 breaker PSEG (100%) Upgrade the 42H circuit b0498.6 breaker PSEG (100%) AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd MAPP Project – install (13.14%) / Dayton (2.15%) / new 500 kV transmission DEOK (3.23%) / DL (1.73%) / from Possum Point to DPL (2.65%) / Dominion Calvert Cliffs and install a b0512 (13.03%) / EKPC (1.77%) / DC line from Calvert JCPL (3.84%) / ME (1.93%) / Cliffs to Vienna and a DC NEPTUNE\* (0.45%) / OVEC line from Calvert Cliffs to (0.07%) / PECO (5.29%) / **Indian River** PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) Install 100 MVAR b0565 capacitor at Cox's Corner 230 kV substation PSEG (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) New Essex – Kearney 138 JCPL (23.49%) / NEPTUNE\* b0814 kV circuit and Kearney (1.61%) / PENELEC (5.37%) / 138 kV bus tie PSEG (67.03%) / RE (2.50%) Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* b0814.1 breaker '1-SHT' with 80 (1.61%) / PENELEC (5.37%) / kA breaker PSEG (67.03%) / RE (2.50%) Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* b0814.2 breaker '15HF' with 80 kA (1.61%) / PENELEC (5.37%) / breaker PSEG (67.03%) / RE (2.50%) Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* breaker '14HF' with 80 kA b0814.3 (1.61%) / PENELEC (5.37%) / breaker PSEG (67.03%) / RE (2.50%) Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* b0814.4 breaker '10HF' with 80 kA (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%) breaker Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* breaker '2HT' with 80 kA b0814.5 (1.61%) / PENELEC (5.37%) / breaker PSEG (67.03%) / RE (2.50%) Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* b0814.6 breaker '22HF' with 80 kA (1.61%) / PENELEC (5.37%) / breaker PSEG (67.03%) / RE (2.50%) JCPL (23.49%) / NEPTUNE\* Replace Kearny 138 kV b0814.7 breaker '4HT' with 80 kA (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%) breaker Replace Kearny 138 kV JCPL (23.49%) / NEPTUNE\* b0814.8 breaker '25HF' with 80 kA (1.61%) / PENELEC (5.37%) / PSEG (67.03%) / RE (2.50%) breaker Replace Essex 138 kV JCPL (23.49%) / NEPTUNE\* breaker '2LM' with 63 kA (1.61%) / PENELEC (5.37%) / b0814.9 breaker and 2.5 cycle PSEG (67.03%) / RE (2.50%) contact parting time

<sup>\*</sup>Neptune Regional Transmission System, LLC

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK Build Branchburg to (3.23%) / DL (1.73%) / DPL Roseland 500 kV (2.65%) / Dominion (13.03%) / b0829 circuit as part of EKPC (1.77%) / JCPL (3.84%) / Branchburg – Hudson ME (1.93%) / NEPTUNE\* 500 kV project (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / Replace Branchburg b0829.6 500 kV breaker 91X ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (96.17%) / RE (3.83%) Replace Branchburg b0829.9 230 kV breaker 102H PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Branchburg 230 b0829.11 kV breaker 32H PSEG (100%) Replace Branchburg 230 b0829.12 kV breaker 52H PSEG (100%) AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Build Roseland - Hudson (2.65%) / Dominion (13.03%) / 500 kV circuit as part of b0830 EKPC (1.77%) / JCPL (3.84%) / Branchburg – Hudson ME (1.93%) / NEPTUNE\* 500 kV project (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)Replace Roseland 230 b0830.1 kV breaker '82H' with 80 PSEG (100% Replace Roseland 230 kV breaker '91H' with 80 b0830.2 PSEG (100%) Replace Roseland 230 kV breaker '22H' with 80 b0830.3 PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace 138/13 kV transformers with 230/13 ComEd (2.51%) / Dayton b0831 kV units as part of (0.09%) / PENELEC (2.75%) / Branchburg – Hudson 500 ECP\*\* (2.45%) / PSEG kV project (88.74%) / RE (3.46%) AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Build Hudson 500 kV (2.65%) / Dominion (13.03%) / switching station as part of b0832 EKPC (1.77%) / JCPL (3.84%) / Branchburg – Hudson 500 ME (1.93%) / NEPTUNE\* kV project (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Build Roseland 500 kV (2.65%) / Dominion (13.03%) / switching station as part of b0833 EKPC (1.77%) / JCPL (3.84%) / Branchburg – Hudson 500 ME (1.93%) / NEPTUNE\* kV project (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

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

<sup>\*\*</sup>East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

1		T
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%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

	Replace 2-4 and 4-5 section	
b1019.7	disconnect and ground	
01019.7	switches at Clifton on the B-	
	2258 circuit	PSEG (100%)
	Replace 1-2 and 2-3 section	
b1019.8	disconnect and ground	
01019.8	switches at Clifton on the K-	
	2263 circuit	PSEG (100%)
	Replace line, ground, 230 kV	
b1019.9	main bus disconnects at	
01019.9	Athenia on the B-2258	
	circuit	PSEG (100%)
	Replace wave trap, line,	
b1019.10	ground 230 kV breaker	
	disconnect and 230 kV main	
	bus disconnects at Athenia	
	on the K-2263 circuit	PSEG (100%)

Required T	ransmission 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%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Convert the West Orange 138 kV substation, the two Roseland – West Orange b1154 138 kV circuits, and the Roseland – Sewaren 138 kV circuit from 138 kV to 230 kV PSEG (96.18%) / RE (3.82%) Build a new 230 kV circuit from Branchburg to Middlesex Sw. Rack. Build b1155 a new 230 kV substation at JCPL (4.61%) / PSEG (91.75%) / RE (3.64%) Middlesex Replace Branchburg 230 kV breaker '81H' with 63 b1155.3 PSEG (100%) Replace Branchburg 230 kV breaker '72H' with 63 b1155.4 PSEG (100%) Replace Branchburg 230 b1155.5 kV breaker '61H' with 63 PSEG (100%) Replace Branchburg 230 kV breaker '41H' with 63 b1155.6 PSEG (100%) Convert the Burlington, Camden, and Cuthbert Blvd 138 kV substations, the 138 kV circuits from Burlington b1156 to Camden, and the 138 kV circuit from Camden to Cuthbert Blvd. from 138 kV to 230 kV PSEG (96.18%) / RE (3.82%) Replace Camden 230 kV b1156.13 breaker '22H' with 80 kA PSEG (100%) Replace Camden 230 kV b1156.14 breaker '32H' with 80 kA PSEG (100%) Replace Camden 230 kV b1156.15 breaker '21H' with 80 kA PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Tra	ansmission Enhancements	Annual Revenue Requirement	ent 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%)

Required Tra	ansmission Enhancements	Annual Revenue Requirem	ent Responsible Customer(s)
			AEC (0.23%) / BGE (0.97%) /
	Expand existing Bergen		ComEd (2.32%) / Dayton
	230 kV substation and		(0.13%) / JCPL (1.17%) /
b1304.2	reconfigure the Athenia		Neptune (0.07%) / HTP
	230 kV substation to		(16.05%) / PENELEC (2.97%) /
	breaker and a half scheme		PEPCO (1.04%) / ECP (2.11%) /
			PSEG (70.16%) / RE (2.78%)
			AEC (0.23%) / BGE (0.97%) /
	Build second 230 kV underground cable from Bergen to Athenia		ComEd (2.32%) / Dayton
			(0.13%) / JCPL (1.17%) /
b1304.3			Neptune (0.07%) / HTP
			(16.05%) / PENELEC (2.97%) /
			PEPCO (1.04%) / ECP (2.11%) /
			PSEG (70.16%) / RE (2.78%)
			AEC (0.23%) / BGE (0.97%) /
	D '11 122017		ComEd (2.32%) / Dayton
	Build second 230 kV		(0.13%) / JCPL (1.17%) /
b1304.4	underground cable from		Neptune (0.07%) / HTP
	Hudson to South Waterfront		(16.05%) / PENELEC (2.97%) /
			PEPCO (1.04%) / ECP (2.11%) /
			PSEG (70.16%) / RE (2.78%)

Required Tra	ansmission 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%)

Required Tra	ansmission Enhancements	Annual Revenue Requirement	ent 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%)

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / Replace Salem 500 kV EKPC (1.77%) / JCPL (3.84%) / b1410 breaker '11X' ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (96.17%) / RE (3.83%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / Replace Salem 500 kV EKPC (1.77%) / JCPL (3.84%) / b1411 breaker '12X' ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (96.17%) / RE (3.83%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / Replace Salem 500 kV EKPC (1.77%) / JCPL (3.84%) / b1412 breaker '20X' ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (96.17%) / RE (3.83%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / Replace Salem 500 kV EKPC (1.77%) / JCPL (3.84%) / b1413 breaker '21X' ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (96.17%) / RE (3.83%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / Replace Salem 500 kV EKPC (1.77%) / JCPL (3.84%) / b1414 breaker '31X' ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (96.17%) / RE (3.83%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / Replace Salem 500 kV EKPC (1.77%) / JCPL (3.84%) / b1415 breaker '32X' ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (96.17%) / RE (3.83%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

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

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Advance n0666.10 (Replace Hudson 230 kV b1752 breaker '2HB' with 80 kA (without TRV cap, so actually 63 kA)) PSEG (100%) Marion 138 kV breaker '7PM' - delay the relay b1753 time to increase the contact parting time to 2.5 cycles PSEG (100%) Marion 138 kV breaker '3PM' - delay the relay time to increase the b1754 contact parting time to 2.5 cycles PSEG (100%) Marion 138 kV breaker '6PM' - delay the relay b1755 time to increase the contact parting time to 2.5 PSEG (100%) cycles AEC (4.96%) / JCPL (44.20%) / Build a second 230 kV NEPTUNE\* (0.53%) / HTP b1787 circuit from Cox's Corner (0.15%) / ECP\*\* (0.16%) / - Lumberton PSEG (48.08%) / RE (1.92%) Install a reactor along the b2034 Kearny - Essex 138 kV line PSEG (100%) Replace Sewaren 138 kV b2035 breaker '11P' PSEG (100%) Replace Sewaren 138 kV b2036 breaker '21P' PSEG (100%) Replace PVSC 138 kV b2037 breaker '452' PSEG (100%) Replace PVSC 138 kV b2038 breaker '552' PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Annual Revenue Requirement Required Transmission Enhancements Responsible Customer(s) Replace Bayonne 138 kV b2039 breaker '11P' PSEG (100%) Reconductor the Mickleton - Gloucester b2139 230 kV parallel circuits with double bundle PSEG (61.11%) / PECO (36.45%) / RE (2.44%) conductor Re-configure the Brunswick 230 kV and 69 b2146 kV substations PSEG (96.16%) / RE (3.84%) Construct Jackson Rd. 69 kV substation and loop the Cedar Grove - Hinchmans Ave into Jackson Rd. and b2151 construct Hawthorne 69 kV substation and build 69 kV circuit from Hinchmans Ave -Hawthorne - Fair Lawn PSEG (100%) Reconfigure the Linden, Bayway, North Ave, and Passaic Valley S.C. 138 b2159 kV substations. Construct

PSEG (72.61%) / HTP (24.49%)

/ RE (2.90%)

station

and loop new 138 kV circuit to new airport

<sup>\*</sup>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) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC Install -100/+525As specified under the **MVAR** dynamic procedures detailed (1.77%) / JCPL (3.84%) / ME b0216 Attachment (1.93%) / NEPTUNE\* (0.45%) / reactive device at Black H-18B, Section 1.b OVEC (0.07%) / PECO (5.29%) / Oak PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** APS (53.10%) / Dominion (36.32%) / PEPCO (10.58%) As specified under the Install third Wylie AEC (11.83%) / DPL (19.40%) / procedures detailed in b0218 Ridge 500/345kV Dominion (13.81%) / JCPL Attachment H-18B. (15.56%) / PECO (39.40%) transformer Section 1.b Upgrade coolers AEC (11.83%) / DPL (19.40%) / on Wylie Ridge 500/345 b0220 Dominion (13.81%) / JCPL kV #7 (15.56%) / PECO (39.40%) APS (50.98%) / BGE (13.42%) / Install fourth Bedington DPL (2.03%) / Dominion b0229 500/138 kV (14.50%) / ME (1.43%) / PEPCO (17.64%)APS (79.16%) / BGE (3.61%) / As specified under the Install fourth procedures detailed DPL (0.86%) / Dominion in Meadowbrook 500/138 b0230 (11.75%) / ME (0.67%) / PEPCO Attachment H-18B. kV Section 1.b (3.95%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required	Transmission Emiancements	Annual Revenue Requiremen	it 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>†</sup>Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

<sup>††</sup>Cost allocations associated with below 500 kV elements of the project

Kequileu 11	ansmission Enhancements	Annuai Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
	Build new Meadow	As specified under the	(2.65%) / Dominion (13.03%) /
b0328.2	Brook – Loudoun 500	procedures detailed in	EKPC (1.77%) / JCPL (3.84%) /
00320.2	kV circuit (20 of 50	Attachment H-18B,	ME (1.93%) / NEPTUNE*
	miles)	Section 1.b	(0.45%) / OVEC (0.07%) /
			PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			Dominion (100%)
		As specified under the	AEC (1.85%) / BGE (21.49%) /
1.02.42	Replace Doubs 500/230	procedures detailed in	DPL (3.91%) / Dominion
b0343	kV transformer #2	Attachment H-18B,	(28.86%) / ME (2.97%) / PECO
		Section 1.b	(5.73%) / PEPCO (35.19%)
		As specified under the	AEC (1.86%) / BGE (21.50%) /
1-0244	Replace Doubs 500/230	procedures detailed in	DPL (3.91%) / Dominion
b0344	kV transformer #3	Attachment H-18B,	(28.82%) / ME (2.97%) / PECO
		Section 1.b	(5.74%) / PEPCO (35.20%)
		As specified under the	AEC (1.85%) / BGE (21.49%) /
b0345	Replace Doubs 500/230	procedures detailed in	DPL (3.90%) / Dominion
00343	kV transformer #4	Attachment H-18B,	(28.83%) / ME (2.98%) / PECO
		Section 1.b	(5.75%) / PEPCO (35.20%)

1104011001		Annual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
	Build new Mt. Storm – So2 Junction 500 kV Att		AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
		As specified under the	(2.65%) / Dominion (13.03%) /
b0347.1	Build new Mt. Storm –	procedures detailed in	EKPC (1.77%) / JCPL (3.84%) /
	502 Junction 500 kV	Attachment H-18B,	ME (1.93%) / NEPTUNE*
	circuit	Section 1.b	(0.45%) / OVEC (0.07%) /
		Section 1.0	PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			APS (78.44%) / PEPCO
			(21.56%)
			` ′
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) /
			AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
			AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK
			AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL
		As specified under the	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) /
	Build new Mt. Storm –	As specified under the	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) /
b0347.2	Meadow Brook 500 kV	procedures detailed in	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE*
b0347.2		procedures detailed in Attachment H-18B,	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.2	Meadow Brook 500 kV	procedures detailed in	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.2	Meadow Brook 500 kV	procedures detailed in Attachment H-18B,	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.2	Meadow Brook 500 kV	procedures detailed in Attachment H-18B,	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.2	Meadow Brook 500 kV	procedures detailed in Attachment H-18B,	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.2	Meadow Brook 500 kV	procedures detailed in Attachment H-18B,	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.2	Meadow Brook 500 kV	procedures detailed in Attachment H-18B,	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required i		T minoral recognition	Responsible Customer(s)
			Load-Ratio Share Allocation:
	Build new 502 Junction procedure		AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
		As specified under the	(2.65%) / Dominion (13.03%) /
b0347.3	Ruild new 502 Junction	procedures detailed in	EKPC (1.77%) / JCPL (3.84%) /
		Attachment H-18B,	ME (1.93%) / NEPTUNE*
	300 K V substation	,	(0.45%) / OVEC (0.07%) /
		Section 1.0	PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			APS (78.44%) / PEPCO
			(21.56%)
			, ,
			<b>Load-Ratio Share Allocation:</b>
			<b>Load-Ratio Share Allocation:</b> AEC (1.71%) / AEP (14.04%) /
			<b>Load-Ratio Share Allocation:</b> AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) /
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL
		As specified under the	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
	Ungrade Meadow Brook	As specified under the	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.4	Upgrade Meadow Brook	procedures detailed in	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.4	Upgrade Meadow Brook 500 kV substation	procedures detailed in Attachment H-18B,	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.4	1 0	procedures detailed in	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.4	1 0	procedures detailed in Attachment H-18B,	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
ь0347.4	1 0	procedures detailed in Attachment H-18B,	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.4	1 0	procedures detailed in Attachment H-18B,	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.4	1 0	procedures detailed in Attachment H-18B,	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.4	1 0	procedures detailed in Attachment H-18B,	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required 1	ransmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
	Replace Harrison 500		EKPC (1.77%) / JCPL (3.84%) /
b0347.5	kV breaker HL-3		ME (1.93%) / NEPTUNE*
	K V breaker TIL 3		(0.45%) / OVEC (0.07%) /
			PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			APS (78.44%) / PEPCO
			(21.560/)
			(21.56%)
			Load-Ratio Share Allocation:
			<b>Load-Ratio Share Allocation:</b> AEC (1.71%) / AEP (14.04%) /
			<b>Load-Ratio Share Allocation:</b> AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) /
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
	Upgrade (per ABB		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.6	Upgrade (per ABB inspection) breaker HL-6		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.6	Upgrade (per ABB inspection) breaker HL-6		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.6	1 2		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.6	1 2		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.6	1 2		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.6	1 2		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.6	1 2		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0347.6	1 2		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)

Required I	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
	Upgrade (per ABB		(2.65%) / Dominion (13.03%) /
b0347.7	inspection) breaker HL-7		EKPC (1.77%) / JCPL (3.84%) /
	mspection) breaker TiL-7		ME (1.93%) / NEPTUNE*
			(0.45%) / OVEC (0.07%) / PECO
			(5.29%) / PENELEC (1.89%) /
			PEPCO (3.82%) / PPL (4.72%) /
			PSEG (6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			APS (78.44%) / PEPCO (21.56%)
			<b>Load-Ratio Share Allocation:</b>
	Upgrade (per ABB		AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
b0347.8	inspection) breaker HL-8		EKPC (1.77%) / JCPL (3.84%) /
	inspection) breaker TIE 0		ME (1.93%) / NEPTUNE*
			(0.45%) / OVEC (0.07%) / PECO
			(5.29%) / PENELEC (1.89%) /
			PEPCO (3.82%) / PPL (4.72%) /
			PSEG (6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			APS (78.44%) / PEPCO (21.56%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 112	distrission Emancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) / APS
		(5.61%) / ATSI (8.10%) / BGE
		(4.36%) / ComEd (13.14%) / Dayton
		(2.15%) / DEOK (3.23%) / DL
		(1.73%) / DPL (2.65%) / Dominion
	Upgrade (per ABB	(13.03%) / EKPC (1.77%) / JCPL
b0347.9	inspection) breaker HL-	(3.84%) / ME (1.93%) /
	10	NEPTUNE* (0.45%) / OVEC
		(0.07%) / PECO (5.29%) /
		PENELEC (1.89%) / PEPCO
		(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)
		DFAX Allocation:
		APS (78.44%) / PEPCO (21.56%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) / APS
		(5.61%) / ATSI (8.10%) / BGE
	Upgrade (per ABB Inspection) Hatfield 500	(4.36%) / ComEd (13.14%) / Dayton
		(2.15%) / DEOK (3.23%) / DL
		(1.73%) / DPL (2.65%) / Dominion
		(13.03%) / EKPC (1.77%) / JCPL
b0347.10		(3.84%) / ME (1.93%) /
	kV breakers HFL-1	NEPTUNE* (0.45%) / OVEC
		(0.07%) / PECO (5.29%) /
		PENELEC (1.89%) / PEPCO
		(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)
		DFAX Allocation:
		APS (78.44%) / PEPCO (21.56%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Tra	ansmission Enhancements	Annual Revenue Require	ment Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) / APS
b0347.11			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
			(2.15%) / DEOK (3.23%) / DL
			(1.73%) / DPL (2.65%) / Dominion
	Upgrade (per ABB		(13.03%) / EKPC (1.77%) / JCPL
b0347.11	Inspection) Hatfield		(3.84%) / ME (1.93%) /
	500 kV breakers HFL-3		NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			APS (78.44%) / PEPCO (21.56%)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) / APS
			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
	Upgrade (per ABB Inspection) Hatfield		(2.15%) / DEOK (3.23%) / DL
			(1.73%) / DPL (2.65%) / Dominion
			(13.03%) / EKPC (1.77%) / JCPL
b0347.12			(3.84%) / ME (1.93%) /
	500 kV breakers HFL-4		NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			APS (78.44%) / PEPCO (21.56%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 1 ra	ansmission Enhancements	Annual Revenue Requirer	ment Responsible Customer(s)
			Load-Ratio Share Allocation:
b0347.13			AEC (1.71%) / AEP (14.04%) / APS
			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
			(2.15%) / DEOK (3.23%) / DL
			(1.73%) / DPL (2.65%) / Dominion
	Upgrade (per ABB		(13.03%) / EKPC (1.77%) / JCPL
b0347.13	Inspection) Hatfield		(3.84%) / ME (1.93%) /
	500 kV breakers HFL-6		NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			APS (78.44%) / PEPCO (21.56%)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) / APS
			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
			(2.15%) / DEOK (3.23%) / DL
			(1.73%) / DPL (2.65%) / Dominion
	Upgrade (per ABB		(13.03%) / EKPC (1.77%) / JCPL
b0347.14	Inspection) Hatfield		(3.84%) / ME (1.93%) /
	500 kV breakers HFL-7		NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			APS (78.44%) / PEPCO (21.56%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 1 ra	ansmission Enhancements	Annual Revenue Require	ment Responsible Customer(s)
			<b>Load-Ratio Share Allocation:</b>
b0347.15			AEC (1.71%) / AEP (14.04%) / APS
			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
b0347.15			(2.15%) / DEOK (3.23%) / DL
			(1.73%) / DPL (2.65%) / Dominion
	Upgrade (per ABB		(13.03%) / EKPC (1.77%) / JCPL
b0347.15	Inspection) Hatfield		(3.84%) / ME (1.93%) /
	500 kV breakers HFL-9		NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			APS (78.44%) / PEPCO (21.56%)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) / APS
			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
			(2.15%) / DEOK (3.23%) / DL
			(1.73%) / DPL (2.65%) / Dominion
	Upgrade (per ABB		(13.03%) / EKPC (1.77%) / JCPL
b0347.16	inspection) Harrison		(3.84%) / ME (1.93%) /
	500 kV breaker 'HL-3'		NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			APS (78.44%) / PEPCO (21.56%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion Replace Meadow (13.03%) / EKPC (1.77%) / JCPL b0347.17 Brook 138 kV breaker (3.84%) / ME (1.93%) / 'MD-10' NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** APS (43.43%) / Dominion (56.57%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL Replace Meadow b0347.18 Brook 138 kV breaker (3.84%) / ME (1.93%) / 'MD-11' NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** APS (43.43%) / Dominion (56.57%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 113	ansmission Ennancements	Annuai Revenue Requiremen	• • • • • • • • • • • • • • • • • • • •
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
	Replace Meadow		Dominion (13.03%) / EKPC
b0347.19	Brook 138 kV breaker		(1.77%) / JCPL (3.84%) / ME
00347.17	'MD-12'		(1.93%) / NEPTUNE* (0.45%) /
	WID-12		OVEC (0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			APS (43.43%) / Dominion
			(56.57%)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
	Replace Meadow Brook 138 kV breaker		BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
			Dominion (13.03%) / EKPC
b0347.20			(1.77%) / JCPL (3.84%) / ME
00347.20	'MD-13'		(1.93%) / NEPTUNE* (0.45%) /
	WID-13		OVEC (0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			150 (10 10:1) (5
			APS (43.43%) / Dominion

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 113	ansmission Ennancements	Annual Revenue Requirement Responsible Customer(s)	
		Load-Ratio Share Allocation	
		AEC (1.71%) / AEP (14.04%)	
		APS (5.61%) / ATSI (8.10%)	,
		BGE (4.36%) / ComEd (13.14	,
		Dayton (2.15%) / DEOK (3.23	/
		DL (1.73%) / DPL (2.65%)	
	Replace Meadow	Dominion (13.03%) / EKP	
b0347.21	Brook 138 kV breaker	(1.77%) / JCPL (3.84%) / M	
00347.21	'MD-14'	(1.93%) / NEPTUNE* (0.459)	,
	MD-14	OVEC (0.07%) / PECO (5.29	,
		PENELEC (1.89%) / PEPC	
		(3.82%) / PPL (4.72%) / PSI	EG
		(6.21%) / RE (0.26%)	
		DFAX Allocation:	
		APS (43.43%) / Dominion	1
		(56.57%)	
		Load-Ratio Share Allocatio	on:
		AEC (1.71%) / AEP (14.04%)	,
		APS (5.61%) / ATSI (8.10%)	5)/
	Replace Meadow Brook 138 kV breaker	BGE (4.36%) / ComEd (13.14	<b>!</b> %)/
		Dayton (2.15%) / DEOK (3.23	3%)/
		DL (1.73%) / DPL (2.65%)	
		Dominion (13.03%) / EKP	C
b0347.22		(1.77%) / JCPL (3.84%) / N	1E
00347.22	'MD-15'	(1.93%) / NEPTUNE* (0.459	%)/
	WID-13	OVEC (0.07%) / PECO (5.29	%)/
		PENELEC (1.89%) / PEPC	O.
		(3.82%) / PPL (4.72%) / PSI	EG
		(6.21%) / RE (0.26%)	
		DFAX Allocation:	
		Di 1121 i inocation.	
		APS (43.43%) / Dominion	1

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC Replace Meadow (1.77%) / JCPL (3.84%) / ME b0347.23 Brook 138 kV breaker (1.93%) / NEPTUNE\* (0.45%) / 'MD-16' OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** APS (43.43%) / Dominion (56.57%)**Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC Replace Meadow (1.77%) / JCPL (3.84%) / ME b0347.24 Brook 138 kV breaker (1.93%) / NEPTUNE\* (0.45%) / 'MD-17' OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** APS (43.43%) / Dominion (56.57%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Troquired Tro	ansinission Ennancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%) /
		Dayton (2.15%) / DEOK (3.23%) /
		DL (1.73%) / DPL (2.65%) /
	Replace Meadow	Dominion (13.03%) / EKPC
	Brook 138 kV breaker	(1.77%) / JCPL (3.84%) / ME
b0347.25	'MD-18'	(1.93%) / NEPTUNE* (0.45%) /
	WID 10	OVEC (0.07%) / PECO (5.29%) /
		PENELEC (1.89%) / PEPCO
		(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)
		DFAX Allocation:
		APS (43.43%) / Dominion
		(56.57%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%) /
		Dayton (2.15%) / DEOK (3.23%) /
		DL (1.73%) / DPL (2.65%) /
	Replace Meadow	Dominion (13.03%) / EKPC
1.02.47.26		(1.770/) / ICDI /2.040/) / ME
1 60347 26	Brook 138 kV brooker	(1.77%) / JCPL (3.84%) / ME
b0347.26	Brook 138 kV breaker	(1.93%) / NEPTUNE* (0.45%) /
b0347.26	Brook 138 kV breaker 'MD-22#1 CAP'	
b0347.26		(1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO
b0347.26		(1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) /
b0347.26		(1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO
b0347.26		(1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG
60347.26		(1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 11a	ansmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) / APS
		(5.61%) / ATSI (8.10%) / BGE
		(4.36%) / ComEd (13.14%) / Dayton
		(2.15%) / DEOK (3.23%) / DL
		(1.73%) / DPL (2.65%) / Dominion
	Replace Meadow	(13.03%) / EKPC (1.77%) / JCPL
b0347.27	Brook 138 kV breaker	(3.84%) / ME (1.93%) /
	'MD-4'	NEPTUNE* (0.45%) / OVEC
		(0.07%) / PECO (5.29%) /
		PENELEC (1.89%) / PEPCO
		(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)
		DFAX Allocation:
		APS (43.43%) / Dominion (56.57%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) / APS
		(5.61%) / ATSI (8.10%) / BGE
		(4.36%) / ComEd (13.14%) / Dayton
		(2.15%) / DEOK (3.23%) / DL
		(1.73%) / DPL (2.65%) / Dominion
	Replace Meadow	(13.03%) / EKPC (1.77%) / JCPL
b0347.28	Brook 138 kV breaker	(3.84%) / ME (1.93%) /
	'MD-5'	NEPTUNE* (0.45%) / OVEC
		(0.07%) / PECO (5.29%) /
		PENELEC (1.89%) / PEPCO
		(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)
		DFAX Allocation:
		APS (43.43%) / Dominion (56.57%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 118	Required Transmission Eminancements Annual Revenue Requirement Responsible Customer(s)			
		Load-Ratio Share Allocation:		
		AEC (1.71%) / AEP (14.04%) / APS		
		(5.61%) / ATSI (8.10%) / BGE		
		(4.36%) / ComEd (13.14%) / Dayton		
		(2.15%) / DEOK (3.23%) / DL		
		(1.73%) / DPL (2.65%) / Dominion		
	Replace Meadowbrook	(13.03%) / EKPC (1.77%) / JCPL		
b0347.29	138 kV breaker 'MD-6'	(3.84%) / ME (1.93%) /		
00347.27	136 KV bleaker WiD-0	NEPTUNE* (0.45%) / OVEC		
		(0.07%) / PECO (5.29%) /		
		PENELEC (1.89%) / PEPCO		
		(3.82%) / PPL (4.72%) / PSEG		
		(6.21%) / RE (0.26%)		
		DFAX Allocation:		
		APS (43.43%) / Dominion (56.57%)		
		Load-Ratio Share Allocation:		
		AEC (1.71%) / AEP (14.04%) / APS		
		(5.61%) / ATSI (8.10%) / BGE		
		(4.36%) / ComEd (13.14%) / Dayton		
		(2.15%) / DEOK (3.23%) / DL		
		(1.73%) / DPL (2.65%) / Dominion		
	Replace Meadowbrook	(13.03%) / EKPC (1.77%) / JCPL		
b0347.30	138 kV breaker 'MD-7'	(3.84%) / ME (1.93%) /		
	136 KV bleaker WiD-7	NEPTUNE* (0.45%) / OVEC		
		(0.07%) / PECO (5.29%) /		
		PENELEC (1.89%) / PEPCO		
		(3.82%) / PPL (4.72%) / PSEG		
		(6.21%) / RE (0.26%)		
		DFAX Allocation:		
		APS (43.43%) / Dominion (56.57%)		

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC Replace Meadowbrook (1.77%) / JCPL (3.84%) / ME b0347.31 138 kV breaker 'MD-8' (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** APS (43.43%) / Dominion (56.57%)**Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC Replace Meadowbrook (1.77%) / JCPL (3.84%) / ME b0347.32 138 kV breaker 'MD-9' (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** APS (43.43%) / Dominion (56.57%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 112	ansmission Enhancements	Annual Revenue Requiremen	t 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		Load-Ratio Share Allocation:  AEC (1.71%) / AEP (14.04%) /  APS (5.61%) / ATSI (8.10%) /  BGE (4.36%) / ComEd (13.14%) /  Dayton (2.15%) / DEOK (3.23%) /  DL (1.73%) / DPL (2.65%) /  Dominion (13.03%) / EKPC  (1.77%) / JCPL (3.84%) / ME  (1.93%) / NEPTUNE* (0.45%) /  OVEC (0.07%) / PECO (5.29%) /  PENELEC (1.89%) / PEPCO  (3.82%) / PPL (4.72%) / PSEG  (6.21%) / RE (0.26%)  DFAX Allocation:  APS (61.86%) / Dayton (11.46%) /  DEOK (20.33%) / EKPC (6.35%)

required 1	Tansinission Enhancements	Allitual Revenue Requirement	Responsible Cusiomer(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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required 1	Tarishiission Elinancements	Allitual Revenue Requirement	responsible Cusiomer(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%)

Required	Transmission Enhancements	Annual Revenue Requir	rement Responsible Customer(s)
b0418	Install a breaker failure auto-restoration scheme at Cabot 500 kV for the failure of the #6 breaker		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)
b0419	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

**Required Transmission Enhancements** Annual Revenue Requirement Responsible Customer(s) Raise limiting structures on Albright - Bethelboro 138 kV to b0460 raise the rating to 175 normal 214 MVA MVA emergency APS (100%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO Construct an Amos to Welton Spring to WV As specified under the (5.29%) / PENELEC (1.89%) / b0491 765 procedures detailed in PEPCO (3.82%) / PPL (4.72%) / state line kV circuit Attachment H-19B PSEG (6.21%) / RE (0.26%) (APS equipment) **DFAX Allocation:** 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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / Construct Welton As specified under the Spring to Kemptown PENELEC (1.89%) / PEPCO b0492 procedures detailed in (3.82%) / PPL (4.72%) / PSEG 765 kV line (APS Attachment H-19B equipment) (6.21%) / RE (0.26%) **DFAX Allocation:** 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%)Replace Eastalco 230 b0492.3 kV breaker D-26 APS (100%) Replace Eastalco 230 b0492.4 kV breaker D-28 APS (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Eastalco 230 kV breaker D-31 b0492.5 APS (100%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC Replace existing (1.77%) / JCPL (3.84%) / ME Kammer 765/500 kV (1.93%) / NEPTUNE\* (0.45%) / b0495 transformer with a new OVEC (0.07%) / PECO (5.29%) / larger transformer PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** AEP (58.84%) / APS (3.61%) / BGE (16.86%) / Dayton (1.39%) / DEOK (1.98%) / EKPC (0.49%) / PEPCO (16.83%) Reconductor the Powell b0533 Mountain - Sutton 138 kV line APS (100%) Install a 28.61 MVAR b0534 capacitor on Sutton 138 kVAPS (100%) Install a 44 MVAR b0535 capacitor on Dutch Fork 138 kV APS (100%) Replace Doubs circuit b0536 breaker DJ1 APS (100%) Replace Doubs circuit b0537 breaker DJ7 APS (100%) Replace Doubs circuit b0538 breaker DJ10 APS (100%) Reconductor Albright -Mettiki - Williams b0572.1 Parsons – Loughs Lane 138 kV with 954 ACSR

APS (100%)

Required 1	ransmission Ennancements	Annuai Revenue Requirement	Responsible Customer(s)
	Reconductor Albright -		
b0572.2	Mettiki – Williams –		
00372.2	Parsons – Loughs Lane		
	138 kV with 954 ACSR		APS (100%)
	Reconfigure circuits in		ļ
b0573	Butler – Cabot 138 kV		ļ
	area		APS (100%)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
I			BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
ı			DL (1.73%) / DPL (2.65%) /
	B 1 E (M / 500		Dominion (13.03%) / EKPC
b0577	Replace Fort Martin 500		(1.77%) / JCPL (3.84%) / ME
	kV breaker FL-1		(1.93%) / NEPTUNE* (0.45%) /
			OVEC (0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			APS (100%)
	Install 33 MVAR 138		
b0584	kV capacitor at		
	Necessity 138 kV		APS (100%)
	Increase Cecil 138 kV		
	capacitor size to 44		
	MVAR, replace five 138		
b0585	kV breakers at Cecil due		
00363	to increased short circuit		
	fault duty as a result of		
	the addition of the Prexy		
	substation		APS (100%)
	Increase Whiteley 138		
b0586	kV capacitor size to 44		
	MVAR		APS (100%)

MVAR
\*Neptune Regional Transmission System, LLC

Required 11		Annual Revenue Requirement	Responsible Customer(s)
	Reconductor AP portion		
	of Tidd – Carnegie 138		
b0587	kV and Carnegie -		
00307	Weirton 138 kV with		
			A DC (1000/)
	954 ACSR		APS (100%)
	Install a 40.8 MVAR		
b0588	138 kV capacitor at		
	Grassy Falls		APS (100%)
b0589	Replace five 138 kV		
00389	breakers at Cecil		ADC (1000/)
			APS (100%)
	Replace #1 and #2		
b0590	breakers at Charleroi		
	138 kV		APS (100%)
	Install a 25.2 MVAR		
b0591	capacitor at Seneca		
00371	Caverns 138 kV		ADS (1000/)
			APS (100%)
	Rebuild Elko – Carbon		
b0673	Center Junction using		
	230 kV construction		APS (100%)
			APS (97.68%) / DL (0.96%) /
	Construct new Osage –		PENELEC (1.09%) / ECP**
b0674	Whiteley 138 kV circuit		(0.01%) / PSEG (0.25%) / RE
	Winteley 136 KV effective		(0.01%)/ 13L3 (0.25%)/ RE (0.01%)
	D 1 1 0 120		(0.0170)
	Replace the Osage 138		
b0674.1	kV breaker		
	'CollinsF126'		APS (100%)
			AEC (1.02%) / APS (81.96%)
			/ DPL (0.85%) / JCPL (1.75%)
	Convert Monocacy -		/ ME (6.37%) / NEPTUNE*
b0675.1	Walkersville 138 kV to		(0.15%) / PECO (3.09%) / PPL
	230 kV		, , , , , , , , , , , , , , , , , , ,
			(2.24%) / PSEG (2.42%) / RE
			(0.09%) / ECP** (0.06%)
			AEC (1.02%) / APS (81.96%)
	Convert Walkersville -		/ DPL (0.85%) / JCPL (1.75%)
106556	Catoctin 138 kV to 230		/ ME (6.37%) / NEPTUNE*
b0675.2	kV		(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			` ' '
			(0.09%) / ECP** (0.06%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.09%) / ECP** (0.09%) / ECP** (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / 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%) / 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%) / 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%) / 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%) / 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%) / 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%) / 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%) / 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%) / 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%) / 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%) / 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%) / PSEG (2.42%) / RE (0.09%) / 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%) / APS (81.96%) / DPL (0.85%) / APS (81.96%) / DPL (0.85	Required 11	ansimission Emiancements	Annual Revenue Requirement	Responsible Customer(s)
Doc				AEC (1.02%) / APS (81.96%) /
B0675.3   kV		Convert Ringgold -		DPL (0.85%) / JCPL (1.75%) /
BV	b0675.3	Catoctin 138 kV to 230		ME (6.37%) / NEPTUNE*
Convert Catoctin -   Carroll 138 kV to 230	00073.3	kV		
Doctor				(2.24%) / PSEG (2.42%) / RE
Convert Catoctin -   Carroll 138 kV to 230 kV   Carroll 138 kV to 230 kV   Convert portion of from 138 kV to 230 kV   Convert Catoctin   Convert Catoctin   Convert Catoctin   Convert Catoctin   Convert Catoctin   Substation from 138 kV to 230 kV   Convert Catoctin   Convert Catoctin   Substation from 138 kV to 230 kV   Convert portion of   Convert Catoctin   Convert Catoctin   Substation from 138 kV to 230 kV   Convert Catoctin   Convert Catoct				(0.09%) / ECP** (0.06%)
b0675.4   Carroll 138 kV to 230 kV   (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)				AEC (1.02%) / APS (81.96%) /
b0675.4 kV (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)  AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.09%) / ECP** (0.06%)  B0675.6 Convert Catoctin Substation from 138 kV to 230 kV (0.15%) / PECO (3.09%) / PPL (2.24%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.09%) / ECP** (0.06%) / AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PEC (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%) / 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%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.09%) / ECP** (0.06%) / AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.09%) / ECP** (0.06%) / 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%) / PPL (0.85%) / JCPL (1.75%) / DPL (0.85%) / DPL (0.		Convert Catoctin -		DPL (0.85%) / JCPL (1.75%) /
Bound	b0675.4	Carroll 138 kV to 230		ME (6.37%) / NEPTUNE*
Convert portion of Ringgold Substation from 138 kV to 230 kV   Convert portion of Convert Catoctin Substation from 138 kV to 230 kV   Convert portion of Convert portion of Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Monocacy Substation from 138 kV to 230 kV	00073.4	kV		(0.15%) / PECO (3.09%) / PPL
Convert portion of Ringgold Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert Catoctin Substation from 138 kV to 230 kV   Convert portion of Carroll Substation from 138 kV to 230 kV   Convert portion of Carroll Substation from 138 kV to 230 kV   Convert portion of Carroll Substation from 138 kV to 230 kV   Convert portion of Carroll Substation from 138 kV to 230 kV   Convert portion of Carroll Substation from 138 kV to 230 kV   Convert portion of Carroll Substation from 138 kV to 230 kV   Convert Monocacy Substation from 138 kV to 230 kV				(2.24%) / PSEG (2.42%) / RE
Convert portion of Ringgold Substation from 138 kV to 230 kV				(0.09%) / ECP** (0.06%)
b0675.5 Ringgold Substation from 138 kV to 230 kV  Ringgold Substation from 138 kV to 230 kV  Bold Substation from 138 kV to 230 kV  Convert Catoctin Substation from 138 kV to 230 kV  Convert Catoctin Substation from 138 kV to 230 kV  Bold Substation from 138 kV to 230 kV  Convert Portion of Carroll Substation from 138 kV to 230 kV  Convert portion of Carroll Substation from 138 kV to 230 kV  Convert Portion of Carroll Substation from 138 kV to 230 kV  Convert Portion of Carroll Substation from 138 kV to 230 kV  Bold Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Bold Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  REC(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%) / PSEG (2.4				AEC (1.02%) / APS (81.96%) /
b0675.5 from 138 kV to 230 kV  from 138 kV to 230 kV  (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)  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%)  Convert portion of Carroll Substation from 138 kV to 230 kV  Convert portion of Carroll Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  Convert Monocacy Substation from 138 kV to 230 kV  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		_		DPL (0.85%) / JCPL (1.75%) /
138 kV to 230 kV	b0675.5			ME (6.37%) / NEPTUNE*
b0675.6    Convert Catoctin	00073.3	from 138 kV to 230 kV		·
December 2015				` ' '
DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* to 230 kV				
b0675.6 Substation from 138 kV to 230 kV     ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)   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%)   AEC (1.02%) / APS (81.96%) / DPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)   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 (0.15%) / PSEG (2.42%) /				
b0675.6 to 230 kV				` ' ' ` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
b0675.8    to 230 kV	b0675.6			· /
(0.09%) / ECP** (0.06%)   AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE*	00073.0	to 230 kV		
AEC (1.02%) / APS (81.96%) /				
Convert portion of   Carroll Substation from   138 kV to 230 kV				` ' '
b0675.7 Carroll Substation from 138 kV to 230 kV (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)  Convert Monocacy Substation from 138 kV to 230 kV (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / PSEG (2.42%) / PSEG (2.42%) / RE				
b0675.7  138 kV to 230 kV  (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)  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				` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
138 kV to 230 kV	b0675.7			
b0675.8 (0.09%) / ECP** (0.06%)  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	00073.7	138 kV to 230 kV		
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				·
b0675.8   Convert Monocacy Substation from 138 kV to 230 kV   DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE				, , , , , , , , , , , , , , , , , , , ,
b0675.8 Substation from 138 kV to 230 kV ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE				, , , , , , , , , , , , , , , , , , , ,
to 230 kV (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE				` ' ' ` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
to 230 kV (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE	b0675.8			` ′
	00013.0	to 230 kV		·
$(0.09\%) / ECP^{**} (0.06\%)$				·
				(0.09%) / ECP** (0.06%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

required 11	ansimission Emiancements	Allitual Revenue Requirement	Responsible Customer(s)
	Convert Walkersville		AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%)
b0675.9	Substation from 138 kV		/ ME (6.37%) / NEPTUNE*
	to 230 kV		(0.15%) / PECO (3.09%) / PPL
			(2.24%) / PSEG (2.42%) / RE
			(0.09%) / ECP** (0.06%)
			AEC (0.64%) / APS (86.70%)
	Daniel Danie		/ DPL (0.53%) / JCPL (1.93%)
1.0676.1	Reconductor Doubs -		/ ME (4.04%) / NEPTUNE*
b0676.1	Lime Kiln (#207) 230kV		(0.18%) / PECO (1.93%) /
			PENELEC (0.93%) / PSEG
			(2.92%) / RE (0.12%) / ECP**
			(0.08%)
			AEC (0.64%) / APS (86.70%)
	December of Doubs		/ DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE*
b0676.2	Reconductor Doubs - Lime Kiln (#231) 230kV		(0.18%) / PECO (1.93%) /
00070.2	Linie Kiii (#231) 230k v		PENELEC (0.93%) / PSEG
			(2.92%) / RE (0.12%) / ECP**
			(2.92%)/ RE(0.12%)/ ECF
	Reconductor Double		(0.0870)
b0677	Toll Gate – Riverton		
00077	with 954 ACSR		APS (100%)
	Reconductor Glen Falls -	1	711 5 (10070)
b0678	Oak Mound 138kV with		
00070	954 ACSR		APS (100%)
	Reconductor Grand		122 (10070)
b0679	Point – Letterkenny with		
	954 ACSR		APS (100%)
	Reconductor Greene -		\/
b0680	Letterkenny with 954		
	ACSR		APS (100%)
b0681	Replace 600/5 CT's at		
	Franklin 138 kV		APS (100%)
	Replace 600/5 CT's at		
b0682	Whiteley 138 kV		A DG (1000)
	Inteleg 150 KV		APS (100%)

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Required 1		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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

required 1	Tansinission 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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Required	ransmission Ennancements	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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	Tarisitussion Emianecticus	Annual Revenue Requirement	responsible editionier(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%)

Required I	ransmission 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%)

Kequileu 1	ransmission Ennancements	Annuai 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%)

Required 1	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Construct Braddock 138		
	kV breaker station that		
	connects the Charleroi -		
	Gordon 138 kV line,		
b1023.4	Washington - Franklin		
	138 kV line and the		
	Washington - Vanceville		
	138 kV line including a		
	66 MVAR capacitor		APS (100%)
	Increase the size of the		
b1027	shunt capacitors at Enon		
	138 kV		APS (100%)
	Raise three structures on		
b1028	the Osage - Collins Ferry		
01020	138 kV line to increase		
	the line rating		APS (100%)
	Reconductor the		
	Edgewater – Vasco Tap;		
b1128	Edgewater – Loyalhanna		
	138 kV lines with 954		. = 5
	ACSR		APS (100%)
	Reconductor the East		
b1129	Waynesboro – Ringgold		
	138 kV line with 954		A DG (1000()
	ACSR		APS (100%)
1 1 1 0 1	Upgrade Double Tollgate		
b1131	– Meadowbrook MDT		A DG (1000()
	Terminal Equipment		APS (100%)
	Upgrade Double		
b1132	Tollgate-Meadowbrook		
	MBG terminal		A DC (1000/)
	equipment		APS (100%)
b1133	Upgrade terminal		A DC (1000/)
	equipment at Springdale		APS (100%)
	Reconductor the		
h1125	Bartonville –		
b1135	Meadowbrook 138 kV		
	line with high		ADC (1000/)
	temperature conductor		APS (100%)

Required 1	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor the Eastgate		
b1137	– Luxor 138 kV;		APS (78.59%) / PENELEC
01137	Eastgate – Sony 138 kV		(14.08%) / ECP ** (0.23%) /
	line with 954 ACSR		PSEG (6.83%) / RE (0.27%)
	Reconductor the King		
b1138	Farm – Sony 138 kV line		
	with 954 ACSR		APS (100%)
	Reconductor the Yukon		
b1139	– Waltz Mills 138 kV		
01139	line with high		
	temperature conductor		APS (100%)
	Reconductor the Bracken		
b1140	Junction – Luxor 138 kV		
	line with 954 ACSR		APS (100%)
	Reconductor the		
	Sewickley – Waltz Mills		
b1141	Tap 138 kV line with		
	high temperature		
	conductor		APS (100%)
	Reconductor the		
	Bartonsville –		
b1142	Stephenson 138 kV;		
01142	Stonewall – Stephenson		
	138 kV line with 954		
	ACSR		APS (100%)
	Reconductor the		
b1143	Youngwood - Yukon		
01143	138 kV line with high		APS (89.92%) / PENELEC
	temperature conductor		(10.08%)
	Reconductor the Bull		
b1144	Creek Junction - Cabot		
01144	138 kV line with high		
	temperature conductor		APS (100%)

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Required 1	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor the Lawson		
b1145	Junction – Cabot 138 kV		
01113	line with high		
	temperature conductor		APS (100%)
	Replace Layton -		
h1146	Smithton #61 138 kV		
01140	line structures to increase		
	line rating		APS (100%)
	Replace Smith - Yukon		
b1147	138 kV line structures to		
	increase line rating		APS (100%)
	Reconductor the		
b1148	Loyalhanna – Luxor 138		
	kV line with 954 ACSR		APS (100%)
	Reconductor the Luxor –		
h1140	Stony Springs Junction		
b1149 b1150 b1151	138 kV line with 954		
	ACSR		APS (100%)
h1150	Upgrade terminal		
01130	equipment at Social Hall		APS (100%)
	Reconductor the		
h1151	Greenwood – Redbud		
01131	138 kV line with 954		
	ACSR		APS (100%)
h1152	Reconductor Grand Point		
01132	<ul> <li>South Chambersburg</li> </ul>		APS (100%)
h1150	Replace Peters 138 kV		
01137	breaker 'Bethel P OCB'		APS (100%)
b1148 b1149 b1150	Replace Peters 138 kV		
01100	breaker 'Cecil OCB'		APS (100%)
h1161	Replace Peters 138 kV		
01101	breaker 'Union JctOCB'		APS (100%)
	Replace Double Toll		
b1162	Gate 138 kV breaker		
	'DRB-2'		APS (100%)
	Replace Double Toll		
b1163	Gate 138 kV breaker		
	'DT 138 kV OCB'		APS (100%)

Required 1	ransmission Enhancements	Annual Revenue Requiremen	t 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 (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

required 1	Taristinssion Emiancements	Ailluai Revenue Requirement	Responsible Customer(s)
	Loop Carbon Center		
b1221.3	Junction – Williamette		
	line into Bear Run		APS (100%)
	Carbon Center – Carbon		
	Center Junction &		
b1221.4	Carbon Center Junction		
	– Bear Run conversion		
	from 138 kV to 230 kV		APS (100%)
	Reconductor Willow-		
b1230	Eureka & Eurkea-St		
	Mary 138 kV lines		APS (100%)
			AEC (1.40%) / APS (75.74%) /
	Reconductor Nipetown –		DPL (1.92%) / JCPL (2.92%) /
b1232	Reid 138 kV with 1033		ME (6.10%) / Neptune (0.27%)
	ACCR		/ PECO (4.40%) / PENELEC
			(3.26%) / PPL (3.99%)
	Upgrade terminal		
b1233.1	equipment at		
	Washington		APS (100%)
	Replace structures		,
b1234	between Ridgeway and		
	Paper city		APS (100%)
	Reconductor the Albright		
1 1005	– Black Oak AFA 138		APS (30.25%) / BGE (16.10%)
b1235	kV line with 795		/ Dominion (30.51%) / PEPCO
	ACSS/TW		(23.14%)
	Upgrade terminal		
	equipment at Albright,		
	replace bus and line side		
b1237	breaker disconnects and		
	leads, replace breaker		
	risers, upgrade RTU and		
	line		APS (100%)
	Install a 138 kV 44		
b1238	MVAR capacitor at		
	Edgelawn substation		APS (100%)
b1238	line Install a 138 kV 44 MVAR capacitor at		

Required 1	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Install a 138 kV 44		
b1239	MVAR capacitor at		
	Ridgeway substation		APS (100%)
	Install a 138 kV 44		
b1240	MVAR capacitor at Elko		
	Substation		APS (100%)
	Upgrade terminal		· ·
	equipment at		
b1241	Washington substation		
	on the GE		
	Plastics/DuPont terminal		APS (100%)
	Replace structures		
b1242	between Collins Ferry		
	and West Run		APS (100%)
	Install a 138 kV		, ,
b1243	capacitor at Potter		
	Substation		APS (100%)
1.1061	Replace Butler 138 kV		, ,
b1261	breaker '1-2 BUS 138'		APS (100%)
	Install 2nd 500/138 kV		, ,
b1383	transformer at 502		APS (93.27%) / DL (5.39%) /
	Junction		PENELEC (1.34%)
	Reconductor		,
	approximately 2.17 miles		
b1384	of Bedington –		
	Shepherdstown 138 kV		
	with 954 ACSR		APS (100%)
	Reconductor Halfway -		, i
b1385	Paramount 138 kV with		
	1033 ACCR		APS (100%)
	Reconductor Double		
1.1206	Tollgate – Meadow		
b1386	Brook 138 kV ckt 2 with		APS (93.33%) / BGE (3.39%) /
	1033 ACCR		PEPCO (3.28%)
	Reconductor Double		, , ,
b1387	Tollgate – Meadow		APS (93.33%) / BGE (3.39%) /
	Brook 138 kV		PEPCO (3.28%)
	Reconductor Feagans		` .
b1388	Mill – Millville 138 kV		
	with 954 ACSR		APS (100%)
_			

Kcquiica .	Tansinission Emiancements	Annual Revenue Requirement	Responsible Customer(s)
b1389	Reconductor Bens Run – St. Mary's 138 kV with		AEP (12.40%) / APS (17.80%)
	954 ACSR		/ DL (69.80%)
1.1200	Replace Bus Tie Breaker		, ,
b1390	at Opequon		APS (100%)
b1391	Replace Line Trap at		
01391	Gore		/ DL (69.80%)
	Replace structure on		
b1392	Belmont – Trissler 138		
	kV line		APS (100%)
ı	Replace structures		
b1393	Kingwood – Pruntytown		. = 2
	138 kV line		APS (100%)
b1395	Upgrade Terminal		1.70 (100.1)
	Equipment at Kittanning		APS (100%)
	Change reclosing on		
b1401	Pruntytown 138 kV		
	breaker 'P-16' to 1 shot		A DC (1000/)
	at 15 seconds		APS (100%)
	Change reclosing on Rivesville 138 kV		
b1402	breaker 'Pruntytown		
01702	#34' to 1 shot at 15		
	seconds		APS (100%)
	Change reclosing on		1112 (10070)
1.1.100	Yukon 138 kV breaker		
b1403	'Y21 Shepler' to 1 shot		
	at 15 seconds		APS (100%)
	Replace the Kiski Valley		,
b1404	138 kV breaker		
01404	'Vandergrift' with a 40		
	kA breaker		APS (100%)
	Change reclosing on		
b1405	Armstrong 138 kV		
31103	breaker 'GARETTRJCT'		
	at 1 shot at 15 seconds		APS (100%)

Required 1	ransmission 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		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)

required 11	ansimission Emiancements	Annual Revenue Requireme	the Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
	Mt. Storm – Doubs		(2.65%) / Dominion (13.03%) /
	transmission line rebuild		EKPC (1.77%) / JCPL (3.84%) /
b1507.3	in Maryland – Total line		ME (1.93%) / NEPTUNE*
01307.3	mileage for APS is 2.71		(0.45%) / OVEC (0.07%) /
	miles		PECO (5.29%) / PENELEC
	innes		(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			APS (21.37%) / BGE (9.63%) /
			Dominion (59.60%) / PEPCO
			(9.40%)
b1510	Install 59.4 MVAR		
01310	capacitor at Waverly		APS (100%)
b1672	Install a 230 kV breaker		
01072	at Carbon Center		APS (100%)
b0539	Replace Doubs circuit		
00339	breaker DJ11		APS (100%)
1-0540	Replace Doubs circuit		
b0540	breaker DJ12		APS (100%)
1.05.41	Replace Doubs circuit		
b0541	breaker DJ13		APS (100%)
1.05.40	Replace Doubs circuit		, ,
b0542	breaker DJ20		APS (100%)
1.05.43	Replace Doubs circuit		` ′
b0543	breaker DJ21		APS (100%)
	Remove instantaneous		
b0544	reclose from Eastalco		
	circuit breaker D-26		APS (100%)
L		1	\/

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 1	ransmission Enhancements	Annual Revenue Requirem	ent Responsible Customer(s)
	Remove instantaneous		
b0545	reclose from Eastalco		
	circuit breaker D-28		APS (100%)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
	I 11 200 NOVA		Dominion (13.03%) / EKPC
1.0550	Install 200 MVAR		(1.77%) / JCPL (3.84%) / ME
b0559	capacitor at Meadow		(1.93%) / NEPTUNE* (0.45%) /
	Brook 500 kV substation		OVEC (0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			APS (43.43%) / Dominion
			(56.57%)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK (3.23%) /
			DL (1.73%) / DPL (2.65%) /
			De (1.75%) / DFL (2.05%) / Dominion (13.03%) / EKPC
			` ,
			(1.77%) / JCPL (3.84%) / ME
			(1.93%) / NEPTUNE* (0.45%) /
	Install 250 MVAR		OVEC (0.07%) / PECO (5.29%) /
b0560	capacitor at Kemptown		PENELEC (1.89%) / PEPCO
	500 kV substation		(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Build a 300 MVAR (2.65%) / Dominion (13.03%) / Switched Shunt EKPC (1.77%) / JCPL (3.84%) / Doubs 500 kV and ME (1.93%) / NEPTUNE\* b1803 increase (~50 MVAR) in (0.45%) / OVEC (0.07%) / size the existing PECO (5.29%) / PENELEC Switched Shunt at (1.89%) / PEPCO (3.82%) / PPL Doubs 500 kV (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** APS (21.37%) / BGE (9.63%) / Dominion (59.60%) / PEPCO (9.40%)**Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / Install a new 600 MVAR b1804 SVC at Meadowbrook ME (1.93%) / NEPTUNE\* 500kV (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** APS (43.43%) / Dominion (56.57%)Replace relaying at the Mt. Airy substation on b1816.1 the Carroll - Mt. Airy 230 kV line APS (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Adjust the control settings of all existing capacitors at Mt Airy 34.5kV, Monocacy 138kV, Ringgold 138kV b1816.2 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%) Replace existing unidirectional LTC controller on the No. 4, b1816.3 230/138 kV transformer Carroll substation with a bidirectional unit APS (100%) Isolate and bypass the b1816.4 138 kV reactor at Germantown Substation APS (100%) 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), b1816.6 800 A wave traps at Carroll Catoctin and with 1200 A units, and 556.5 ACSR **SCCIR** (Sub-conductor) line risers and bus traps with 795 ACSR or equivalent APS (100%)

Required 11	ransmission Enhancements	Annuai Revenue Requirement	Responsible Customer(s)
	Replace the 1200 A		
	wave trap, line risers,		
b1822	breaker risers with 1600		
01622	A capacity terminal		
	equipment at Reid 138		
	kV SS		APS (100%)
	Replace the 800 A wave		
b1823	trap with a 1200 A wave		
01823	trap at Millville 138 kV		
	substation		APS (100%)
	Reconductor Grant Point		
	- Guilford 138kV line		
b1824	approximately 8 miles of	•	
	556 ACSR with 795		
	ACSR		APS (100%)
	Replace the 800 Amp		
L1005	line trap at Butler 138		
b1825	kV Sub on the Cabot		
	East 138 kV line		APS (100%)
	Change the CT ratio at		
b1826	Double Toll Gate 138		
	kV SS on MDT line		APS (100%)
	Change the CT ratio at		
b1827	Double Toll Gate 138		
	kV SS on MBG line		APS (100%)
	Reconductor the		
	Bartonville – Stephenson		
b1828.1	3.03 mile 138 kV line of		
	556 ACSR with 795		
	ACSR		APS (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Reconductor 14.3 miles of 556 ACSR with 795 ACSR from Old Chapel to Millville 138 kV and b1835 upgrade line risers at Old APS (37.68%) / Dominion Chapel 138 kV (34.46%) / PEPCO (13.69%) / Millville 138 kV and BGE (11.45%) / ME (2.01%) / replace 1200 A wave PENELEC (0.53%) / DL trap at Millville 138 kV (0.18%)Replace 1200 A wave b1836 trap with 1600 A wave trap at Reid 138 kV SS APS (100%) Replace 750 CU breaker risers with 795 ACSR at Marlowe 138 kV and b1837 replace 1200 A wave traps with 1600 A wave traps at Marlowe 138 kV and Bedington 138 kV APS (100%) Replace the 1200 Bedington 138 kV line air switch and the 1200 b1838 A 138 kV bus tie air switch at Nipetown 138

APS (100%)

APS (100%)

Grand Point 138 kV SS and Guildford 138 kV

with

1600

additional

capacitors

A

33

at

kV

SS

b1839

switches

MVAR

Install

<sup>\*</sup> Neptune Regional Transmission System, LLC

required i	Tansmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Construct a 138 kV line		
b1840	between Buckhannon		
01040	and Weston 138 kV		
	substations		APS (100%)
	Replace line trap at		
b1902	Stonewall on the		
01702	Stephenson 138 kV line		
	terminal		APS (100%)
	Loop the Homer City-		
	Handsome Lake 345 kV		
b1941	line into the Armstrong		
01941	substation and install a		
	345/138 kV transformer		APS (67.86%) / PENELEC
	at Armstrong		(32.14%)
	Change the CT ratio at		
b1942	Millville to improve the		
01772	Millville – Old Chapel		
	138 kV line ratings		APS (100%)
	Convert Moshannon		APS (41.06%) / DPL (6.68%) /
b1964	substation to a 4 breaker		JCPL (5.48%) / ME (10.70%) /
01701	230 kV ring bus		Neptune* (0.53%) / PECO
			(15.53%) / PPL (20.02%)
	Install a 44 MVAR 138		
b1965	kV capacitor at Luxor		177 (100-1)
	substation		APS (100%)
	Upgrade the AP portion		
	of the Elrama – Mitchell		
b1986	138 kV line by replace		
	breaker risers on the		
	Mitchell 138 kV bus on		A P.G. (1000())
	the Elrama terminal		APS (100%)
	Reconductor the Osage-		
	Collins Ferry 138 kV		
b1987	line with 795 ACSS.		
	Upgrade terminal		
	equipment at Osage and		A DG (1000)
	Collins Ferry		APS (100%)

required	Tansinission Emancements	Annual Revenue Requirement	responsible customer(s)
	Raise structures between		
	Lake Lynn and West		
b1988	Run to eliminate the		
01700	clearance de-rates on the		
	West Run – Lake Lynn		
	138 kV line		APS (100%)
	Raise structures between		
	Collins Ferry and West		
L1000	Run to eliminate the		
b1989	clearance de-rates on the		
	Collins Ferry - West Run		
	138 kV line		APS (100%)
	Replace Weirt 138 kV		
1.0005	breaker 'S-		
b2095	TORONTO226' with		
	63kA rated breaker		APS (100%)
	Revise the reclosing of		· · · · · · · · · · · · · · · · · · ·
b2096	Weirt 138 kV breaker		
	'2&5 XFMR'		APS (100%)
	Replace Ridgeley 138		· /
b2097	kV breaker '#2 XFMR		
	OCB'		APS (100%)
	Revise the reclosing of		· · · · · · · · · · · · · · · · · · ·
1.2000	Ridgeley 138 kV breaker		
b2098	'AR3' with 40kA rated		
	breaker		APS (100%)
	Revise the reclosing of		
b2099	Ridgeley 138 kV breaker		
	'RC1'		APS (100%)
	Replace Ridgeley 138		
b2100	kV breaker 'WC4' with		
	40kA rated breaker		APS (100%)
	Replace Ridgeley 138		· /
1 2101	kV breaker '1 XFMR		
b2101	OCB' with 40kA rated		
	breaker		APS (100%)
	Replace Armstrong 138		
10100	kV breaker		
b2102	'GARETTRJCT' with		
	40kA rated breaker		APS (100%)
		1	(-00/0)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Armstrong 138 kV breaker 'BURMA' b2103 with 40kA rated breaker APS (100%) Replace Armstrong 138 kV breaker b2104 'KITTANNING' with 40kA rated breaker APS (100%) Replace Armstrong 138 kV breaker b2105 'KISSINGERJCT' with 40kA rated breaker APS (100%) Replace Wylie Ridge 345 kV breaker 'WK-1' b2106 with 63kA rated breaker APS (100%) Replace Wylie Ridge 345 kV breaker 'WK-2' b2107 with 63kA rated breaker APS (100%) Replace Wylie Ridge b2108 345 kV breaker 'WK-3' with 63kA rated breaker APS (100%) Replace Wylie Ridge 345 kV breaker 'WK-4' b2109 with 63kA rated breaker APS (100%) Replace Wylie Ridge b2110 345 kV breaker 'WK-6' with 63kA rated breaker APS (100%) Replace Wylie Ridge b2111 138 kV breaker 'WK-7' with 63kA rated breaker APS (100%) Replace Wylie Ridge b2112 345 kV breaker 'WK-5' APS (100%) Replace Weirton 138 kV breaker 'NO 6 XFMR' b2113 with 63kA rated breaker APS (100%) Replace Armstrong 138 kV breaker 'Bus-Tie' b2114

APS (100%)

(Status On-Hold pending

retirement)

rtequired 1		minual Revenue Requirement	responsible Customer(s)
b2124.1	Add a new 138 kV line		
02124.1	exit		APS (100%)
	Construct a 138 kV ring		
b2124.2	bus and install a 138/69		
	kV autotransformer		APS (100%)
	Add new 138 kV line exit		
b2124.3	and install a 138/25 kV		
	transformer		APS (100%)
b2124.4	Construct approximately		
02127.7	5.5 miles of 138 kV line		APS (100%)
	Convert approximately		
b2124.5	7.5 miles of 69 kV to 138		
	kV		APS (100%)
	Install a 75 MVAR 230		
b2156	kV capacitor at		
	Shingletown Substation		APS (100%)
	Replace 800A wave trap		
b2165	at Stonewall with a 1200		
	A wave trap		APS (100%)
	Reconductor the Millville		
	– Sleepy Hollow 138kV		
	4.25 miles of 556 ACSR		
b2166	with 795 ACSR, upgrade		
02100	line risers at Sleepy		
	Hollow, and change 1200		
	A CT tap at Millville to		
	800		APS (100%)
	For Grassy Falls 138kV		
	Capacitor bank adjust		
	turn-on voltage to 1.0pu		
	with a high limit of		
b2168	1.04pu, For Crupperneck		
22100	and Powell Mountain		
	138kV Capacitor Banks		
	adjust turn-on voltage to		
	1.01pu with a high limit		A DG (10051)
	of 1.035pu		APS (100%)

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

Annual Revenue Requirement Required Transmission Enhancements Responsible Customer(s) Install a 765/138 kV transformer at Amos b0318 AEP (99.00%) / PEPCO (1.00%) Replace entrance conductors, wave traps, and risers at the Tidd 345 kV station on the Tidd – Canton b0324 Central 345 kV circuit AEP (100%) Replace Cook 345 kV b0447 breaker M2 AEP (100%) Replace Cook 345 kV b0448 breaker N2 AEP (100%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE\* (0.45%) / As specified under OVEC (0.07%) / PECO (5.29%) / Construct an Amos – the procedures PENELEC (1.89%) / PEPCO b0490 Bedington 765 kV circuit (3.82%) / PPL (4.72%) / PSEG detailed in (AEP equipment) Attachment H-19B (6.21%) / RE (0.26%) **DFAX Allocation:** 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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	Transmission Enhancements	Annual Revenue Requ	irement Responsible Custom	er(s)
		•	Load-Ratio Share Allocation	on:
			AEC (1.71%) / AEP (14.04%)	/ APS
			(5.61%) / ATSI (8.10%) / Bo	GE
			(4.36%) / ComEd (13.14%) / D	ayton
			(2.15%) / DEOK (3.23%) / I	DL
			(1.73%) / DPL (2.65%) / Dom	inion
			(13.03%) / EKPC (1.77%) / Jo	CPL
			(3.84%) / ME (1.93%) / NEPTU	UNE*
			(0.45%) / OVEC (0.07%) / PI	ECO
b0490.2	Replace Amos 138 kV		(5.29%) / PENELEC (1.89%	<b>5</b> )/
00490.2	breaker 'B'		PEPCO (3.82%) / PPL (4.729	%)/
			PSEG (6.21%) / RE (0.26%	(o)
			<b>DFAX Allocation:</b>	
			AEC (5.01%) / AEP (4.39%) /	APS
			(9.26%) / BGE (4.43%) / DL (0	.02%)
			/ DPL (6.91%) / Dominion (10.8	82%)/
			JCPL (11.64%) / ME (2.94%	ó)/
			NEPTUNE (1.12%) / PECO (14	1.51%)
			/ PEPCO (6.11%) / PPL (6.39	%)/
			PSEG (15.86%) / RE (0.599	%)

Required T	Transmission Enhancements	Annual Revenue Req	uirement	Responsible Customer(s)
		_	Load	-Ratio Share Allocation:
			AEC (1.	71%) / AEP (14.04%) / APS
			(5.61)	%) / ATSI (8.10%) / BGE
			(4.36%)	/ ComEd (13.14%) / Dayton
			(2.15)	%) / DEOK (3.23%) / DL
			(1.73%)	) / DPL (2.65%) / Dominion
			$(13.03^{\circ})$	%) / EKPC (1.77%) / JCPL
			(3.84%)	/ ME (1.93%) / NEPTUNE*
			(0.45%	) / OVEC (0.07%) / PECO
b0490.3	Replace Amos 138 kV		(5.29)	%) / PENELEC (1.89%) /
00490.3	breaker 'B1'		PEPC	O (3.82%) / PPL (4.72%) /
			PSE	G (6.21%) / 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%) /
			NEPTUN	NE (1.12%) / PECO (14.51%)
			/ PEPC	CO (6.11%) / PPL (6.39%) /
			PSE	G (15.86%) / RE (0.59%)

Required T	Transmission Enhancements	Annual Revenue Requ	uirement	Responsible Customer(s)
			Load-	Ratio Share Allocation:
			AEC (1.7	71%) / AEP (14.04%) / APS
			(5.61%	%) / ATSI (8.10%) / BGE
			(4.36%)	/ ComEd (13.14%) / Dayton
			(2.15%	%) / DEOK (3.23%) / DL
			(1.73%)	/ DPL (2.65%) / Dominion
			(13.03%	%) / EKPC (1.77%) / JCPL
			(3.84%)	ME (1.93%) / NEPTUNE*
			(0.45%)	) / OVEC (0.07%) / PECO
b0490.4	Replace Amos 138 kV		(5.29%	6) / PENELEC (1.89%) /
00490.4	breaker 'C'		PEPCO	O (3.82%) / PPL (4.72%) /
			PSEC	G (6.21%) / RE (0.26%)
			]	DFAX Allocation:
			AEC (5.	01%) / AEP (4.39%) / APS
			(9.26%)/	BGE (4.43%) / DL (0.02%)
			/ DPL (6.9	91%) / Dominion (10.82%) /
			JCPL	(11.64%) / ME (2.94%) /
			NEPTUN	E (1.12%) / PECO (14.51%)
			/ PEPC	O (6.11%) / PPL (6.39%) /
			PSEC	G (15.86%) / RE (0.59%)

Required T	Transmission Enhancements	Annual Revenue Requ	uirement	Responsible Customer(s)
			Load-	Ratio Share Allocation:
			AEC (1.7	(1%) / AEP (14.04%) / APS
			(5.61%	6) / ATSI (8.10%) / BGE
			(4.36%)/	ComEd (13.14%) / Dayton
			(2.15%	%) / DEOK (3.23%) / DL
			(1.73%)	/ DPL (2.65%) / Dominion
			(13.03%	5) / EKPC (1.77%) / JCPL
			(3.84%)/	ME (1.93%) / NEPTUNE*
			(0.45%)	/ OVEC (0.07%) / PECO
b0490.5	Replace Amos 138 kV		(5.29%	6) / PENELEC (1.89%) /
00490.3	breaker 'C1'		PEPCC	O (3.82%) / PPL (4.72%) /
			PSEC	G (6.21%) / RE (0.26%)
			]	DFAX Allocation:
			AEC (5.0	01%) / AEP (4.39%) / APS
			(9.26%)/	BGE (4.43%) / DL (0.02%)
			/ DPL (6.9	91%) / Dominion (10.82%) /
			JCPL (	(11.64%) / ME (2.94%) /
			NEPTUN	E (1.12%) / PECO (14.51%)
			/ PEPCO	O (6.11%) / PPL (6.39%) /
			PSEG	(15.86%) / RE (0.59%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requir	rement Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) / APS
			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
			(2.15%) / DEOK (3.23%) / DL
			(1.73%) / DPL (2.65%) / Dominion
			(13.03%) / EKPC (1.77%) / JCPL
			(3.84%) / ME (1.93%) / NEPTUNE*
			(0.45%) / OVEC (0.07%) / PECO
b0490.6	Replace Amos 138 kV		(5.29%) / PENELEC (1.89%) /
00490.0	breaker 'D'		PEPCO (3.82%) / PPL (4.72%) /
			PSEG (6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)

Required T	Transmission Enhancements	Annual Revenue Req	uirement	Responsible Customer(s)
			Load	-Ratio Share Allocation:
			AEC (1.	71%) / AEP (14.04%) / APS
			(5.61	%) / ATSI (8.10%) / BGE
			(4.36%)	/ ComEd (13.14%) / Dayton
			(2.15	%) / DEOK (3.23%) / DL
			(1.73%)	) / DPL (2.65%) / Dominion
			(13.03)	%) / EKPC (1.77%) / JCPL
			(3.84%)	/ ME (1.93%) / NEPTUNE*
			(0.45%	o) / OVEC (0.07%) / PECO
b0490.7	Replace Amos 138 kV		(5.29	%) / PENELEC (1.89%) /
00490.7	breaker 'D2'		PEPC	O (3.82%) / PPL (4.72%) /
			PSE	G (6.21%) / RE (0.26%)
				DFAX Allocation:
			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%) /
				NE (1.12%) / PECO (14.51%)
			/ PEPC	CO (6.11%) / PPL (6.39%) /
			PSE	G (15.86%) / RE (0.59%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required T	Transmission Enhancements	Annual Revenue Req	uirement	Responsible Customer(s)
_			Load	-Ratio Share Allocation:
			AEC (1.	71%) / AEP (14.04%) / APS
			(5.61)	%) / ATSI (8.10%) / BGE
			(4.36%)	/ ComEd (13.14%) / Dayton
			(2.15	%) / DEOK (3.23%) / DL
			(1.73%)	) / DPL (2.65%) / Dominion
			(13.03)	%) / EKPC (1.77%) / JCPL
			(3.84%)	/ ME (1.93%) / NEPTUNE*
			(0.45%	o) / OVEC (0.07%) / PECO
b0490.8	Replace Amos 138 kV		(5.29	%) / PENELEC (1.89%) /
00490.8	breaker 'E'		PEPC	O (3.82%) / PPL (4.72%) /
			PSE	G (6.21%) / RE (0.26%)
				DFAX Allocation:
			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%) /
			NEPTUN	NE (1.12%) / PECO (14.51%)
			/ PEPC	CO (6.11%) / PPL (6.39%) /
			PSE	G (15.86%) / RE (0.59%)

Required T	Transmission Enhancements	Annual Revenue Requ	uirement	Responsible Customer(s)
			Load	-Ratio Share Allocation:
			AEC (1.	71%) / AEP (14.04%) / APS
			(5.61	%) / ATSI (8.10%) / BGE
			(4.36%)	/ ComEd (13.14%) / Dayton
			(2.15	%) / DEOK (3.23%) / DL
			(1.73%)	) / DPL (2.65%) / Dominion
			(13.03)	%) / EKPC (1.77%) / JCPL
			(3.84%)	/ ME (1.93%) / NEPTUNE*
			(0.45%	o) / OVEC (0.07%) / PECO
b0490.9	Replace Amos 138 kV		(5.29	%) / PENELEC (1.89%) /
00490.9	breaker 'E2'		PEPC	O (3.82%) / PPL (4.72%) /
			PSE	G (6.21%) / RE (0.26%)
				DFAX Allocation:
			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%) /
				NE (1.12%) / PECO (14.51%)
			/ PEPC	CO (6.11%) / PPL (6.39%) /
			PSE	G (15.86%) / RE (0.59%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion Add advanced two (13.03%) / EKPC (1.77%) / JCPL technology circuit breakers b0504 at Hanging Rock 765 kV to (3.84%) / ME (1.93%) / NEPTUNE\* (0.45%) / OVEC improve operational performance (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** AEP (100%) Reconductor East Side Lima b0570 - Sterling 138 kV AEP (41.99%) / ComEd (58.01%) Reconductor West Millersport – b0571 Millersport AEP (73.83%) / ComEd (19.26%) / 138 kV Dayton (6.91%) Establish a new 69 kV circuit between the Canal Road and East Wooster stations, establish a new 69 b0748 kV circuit between the West Millersburg and Moreland Switch stations (via Shreve), add reactive support via cap banks AEP (100%) Hazard Area 138 kV and 69 b0838 **kV** Improvement Projects AEP (100%) Replace existing 450 MVA transformer at Twin Branch b0839 345 / 138 kV with a 675 MVA transformer AEP (99.73%) / Dayton (0.27%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) String a second 138 kV circuit on the open tower b0840 position between Twin Branch and East Elkhart AEP (100%) Establish a new 138/69-34.5kV Station b0840.1 interconnect the existing 34.5kV network AEP (100%) Replace Baileysville 138 b0917 kV breaker 'P' AEP (100%) Replace Riverview 138 b0918 kV breaker '634' AEP (100%) Replace Torrey 138 kV b0919 breaker 'W' AEP (100%) Construct a new 345/138kV station on the Marquis-Bixby 345kV b1032.1 line near the intersection with Ross - Highland AEP (89.97%) / Dayton 69kV (10.03%)Construct two 138kV outlets to Delano 138kV b1032.2 station and to Camp AEP (89.97%) / Dayton Sherman station (10.03%)AEP (89.97%) / Dayton Convert Ross - Circleville b1032.3 69kV to 138kV (10.03%)138/69kV Install transformer at new station b1032.4 and connect in the Ross -AEP (89.97%) / Dayton Highland 69kV line (10.03%)Add a third delivery point from AEP's East Danville b1033 Station to the City of Danville. AEP (100%)

rtequirea 1		Annuai Revenue Requireme	1
	Establish new South		AEP (96.01%) / APS (0.62%) /
	Canton - West Canton		ComEd (0.19%) / Dayton
b1034.1	138kV line (replacing		(0.44%) / DL (0.13%) /
01054.1	Torrey - West Canton) and		PENELEC (2.61%)
	Wagenhals – Wayview		
	138kV		
	Loop the existing South		AEP (96.01%) / APS (0.62%) /
	Canton - Wayview 138kV		ComEd (0.19%) / Dayton
b1034.2	circuit in-and-out of West		(0.44%) / DL (0.13%) /
	Canton		PENELEC (2.61%)
	Install a 345/138kV 450		AEP (96.01%) / APS (0.62%) /
b1034.3	MVA transformer at		ComEd (0.19%) / Dayton
01057.5	Canton Central		(0.44%) / DL (0.13%) /
			PENELEC (2.61%)
	Rebuild/reconductor the Sunnyside - Torrey 138kV line		AEP (96.01%) / APS (0.62%) /
b1034.4			ComEd (0.19%) / Dayton
01037.7			(0.44%) / DL (0.13%) /
	inic		PENELEC (2.61%)
	Disconnect/eliminate the		AEP (96.01%) / APS (0.62%) /
b1034.5	West Canton 138kV terminal at Torrey Station		ComEd (0.19%) / Dayton
01054.5			(0.44%) / DL (0.13%) /
	terminar at Torrey Station		PENELEC (2.61%)
	Replace all 138kV circuit		
	breakers at South Canton		AEP (96.01%) / APS (0.62%) /
b1034.6	Station and operate the		ComEd (0.19%) / Dayton
	station in a breaker and a		(0.44%) / DL (0.13%) /
	half configuration		PENELEC (2.61%)
	Replace all obsolete 138kV		AEP (96.01%) / APS (0.62%) /
b1034.7	circuit breakers at the		ComEd (0.19%) / Dayton
01034.7	Torrey and Wagenhals		(0.44%) / DL (0.13%) /
	stations		PENELEC (2.61%)

Required 1	ransmission Ennancements	Annuai Revenue Requireme	ent Responsible Customer(s)
	Install additional 138kV		
b1034.8	circuit breakers at the West		
	Canton, South Canton,		
	Canton Central, and		AEP (96.01%) / APS (0.62%) /
	Wagenhals stations to		ComEd (0.19%) / Dayton
	accommodate the new		(0.44%) / DL (0.13%) /
	circuits		PENELEC (2.61%)
	Establish a third 345kV		
	breaker string in the West		
	Millersport Station.		
	Construct a new West		
b1035	Millersport – Gahanna		
	138kV circuit.		
	Miscellaneous		
	improvements to 138kV		
	transmission system.		AEP (100%)
	Upgrade terminal		
b1036	equipment at Poston		
01030	Station and update remote		
	end relays		AEP (100%)
	Sag check Bonsack-		
	Cloverdale 138 kV,		
	Cloverdale–Centerville		
	138kV, Centerville–Ivy		
b1037	Hill 138kV, Ivy Hill–		
01037	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

rtequirea i	Turistriission Emidicentents	Timudi Neveride Negamenie	nt responsible editioner(s)
	Perform a sag study for the		
	Madison – Cross Street 138		
b1039	kV line and perform the		
	required work to improve		
	the emergency rating		AEP (100%)
	Rebuild an 0.065 mile		
	section of the New Carlisle		
b1040	– Olive 138 kV line and		
	change the 138 kV line		
	switches at New Carlisle		AEP (100%)
	Perform a sag study for the		
b1041	Moseley - Roanoke 138 kV		
01041	to increase the emergency		
	rating		AEP (100%)
	Perform sag studies to raise		
b1042	the emergency rating of		
	Amos – Poca 138kV		AEP (100%)
	Perform sag studies to raise		
b1043	the emergency rating of		
	Turner - Ruth 138kV		AEP (100%)
	Perform sag studies to raise		
b1044	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required 1	ransmission Enhancements	Annuai Revenue Requireme	ent Responsible Customer(s)
	Reconductor the Bixby -		
b1048	Three C - Groves and		
	Bixby - Groves 138 kV		
	tower line		AEP (100%)
	Upgrade the risers at the		
	Riverside station to		
b1049	increase the rating of		
	Benton Harbor – Riverside		
	138kV		AEP (100%)
	Rebuilding and reconductor		
b1050	the Bixby – Pickerington		
01030	Road - West Lancaster 138		
	kV line		AEP (100%)
	Perform a sag study for the		
	Kenzie Creek – Pokagon		
b1051	138 kV line and perform		
01031	the required work to		
	improve the emergency		
	rating		AEP (100%)
	Unsix-wire the existing		
b1052	Hyatt - Sawmill 138 kV		
01032	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%)
	Add 28.8 MVAR 138 kV		
	capacitor bank at Huffman		
b1091	and 43.2 MVAR 138 kV		
	Bank at Jubal Early and		
	52.8 MVAR 138 kV Bank		
	at Progress Park Stations		AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Tansinission Emiancements	Ailliuai Keveliue Requiremen	it Responsible Customer(s)
	Add 28.8 MVAR 138 kV		
	capacitor bank at Sullivan		
b1092	Gardens and 52.8 MVAR		
	138 kV Bank at Reedy		
	Creek Stations		AEP (100%)
	Add a 43.2 MVAR		
b1093	capacitor bank at the		
01093	Morgan Fork 138 kV		
	Station		AEP (100%)
	Add a 64.8 MVAR		
b1094	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		
01109	kV breaker 'D1'		AEP (100%)
b1110	Replace Sporn A 138 kV		
01110	breaker 'J'		AEP (100%)
1 1 1 1 1	Replace Sporn A 138 kV		
b1111	breaker 'J2'		AEP (100%)
L1110	Replace Sporn A 138 kV		
b1112	breaker 'L'		AEP (100%)
L1112	Replace Sporn A 138 kV		
b1113	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%)
	Perform a sag study on		
b1227	Altavista – Leesville 138		
	kV circuit		AEP (100%)
		,	

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Enhancements	Annuai Revenue Requiremen	nt Responsible Customer(s)
	Replace the existing 138/69-		
	12 kV transformer at West		
b1231	Moulton Station with a		
	138/69 kV transformer and a	ı	
	69/12 kV transformer		AEP (96.69%) / Dayton (3.31%)
b1375	Replace Roanoke 138 kV		
01373	breaker 'T'		AEP (100%)
b1376	Replace Roanoke 138 kV		
01370	breaker 'E'		AEP (100%)
b1377	Replace Roanoke 138 kV		
013//	breaker 'F'		AEP (100%)
L1270	Replace Roanoke 138 kV		
b1378	breaker 'G'		AEP (100%)
b1379	Replace Roanoke 138 kV		
013/9	breaker 'B'		AEP (100%)
L1200	Replace Roanoke 138 kV		
b1380	breaker 'A'		AEP (100%)
1.1201	Replace Olive 345 kV		
b1381	breaker 'E'		AEP (100%)
b1382	Replace Olive 345 kV		
01382	breaker 'R2'		AEP (100%)
	Perform a sag study on the		
b1416	Desoto – Deer Creek 138 kV		
01410	line to increase the		
	emergency rating		AEP (100%)
	Perform a sag study on the		
L1417	Delaware – Madison 138 kV		
b1417	line to increase the		
	emergency rating		AEP (100%)
	Perform a sag study on the		
h1/10	Rockhill – East Lima 138 kV	,	
b1418	line to increase the		
	emergency rating		AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

_		Illiaar Revenae Requirement	responsible editioner(s)
	Perform a sag study on the		
b1419	Findlay Center – Fostoria Ctl		
	138 kV line to increase the		177 (1001)
	emergency rating		AEP (100%)
	A sag study will be required		
	to increase the emergency		
	rating for this line.		
b1420	Depending on the outcome of		
	this study, more action may		
	be required in order to		
	increase the rating		AEP (100%)
	Perform a sag study on the		
b1421	Sorenson – McKinley 138 kV		
01 121	line to increase the		
	emergency rating		AEP (100%)
	Perform a sag study on John		
	Amos – St. Albans 138 kV		
b1422	line to allow for operation up		
	to its conductor emergency		
	rating		AEP (100%)
	A sag study will be performed		
	on the Chemical – Capitol		
b1423	Hill 138 kV line to determine		
	if the emergency rating can be		
	utilized		AEP (100%)
	Perform a sag study for		
b1424	Benton Harbor – West Street		
01121	– Hartford 138 kV line to		
	improve the emergency rating		AEP (100%)
	Perform a sag study for the		
	East Monument – East		
b1425	Danville 138 kV line to allow		
01723	for operation up to the		
	conductor's maximum		
	operating temperature		AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required	Tansinission Emancements	Annual Revenue Requirement	Responsible Customer(s)
	Perform a sag study for the		
	Reusens – Graves 138 kV line		
b1426	to allow for operation up to		
	the conductor's maximum		
	operating temperature		AEP (100%)
	Perform a sag study on Smith		
	Mountain – Leesville –		
b1427	Altavista – Otter 138 kV and		
	on Boones – Forest – New		
	London – JohnsMT – Otter		AEP (100%)
	Perform a sag study on Smith		
	Mountain – Candlers		
b1428	Mountain 138 kV and Joshua		
	Falls – Cloverdale 765 kV to		
	allow for operation up to		AEP (100%)
	Perform a sag study on		
	Fremont – Clinch River 138		
b1429	kV to allow for operation up		
	to its conductor emergency		
	ratings		AEP (100%)
	Install a new 138 kV circuit		
	breaker at Benton Harbor		
b1430	station and move the load		
	from Watervliet 34.5 kV		
	station to West street 138 kV		AEP (100%)
	Perform a sag study on the		
	Kenova – Tri State 138 kV		
b1432	line to allow for operation up		
	to their conductor emergency		
	rating		AEP (100%)
	Replace risers in the West		
	Huntington Station to		
b1433	increase the line ratings		
	which would eliminate the		
	overloads for the		
	contingencies listed		AEP (100%)

11404	Perform a sag study on the line from Desoto to Madison.	
b1434	Replace bus and risers at	
	Daleville station and replace	177 (100)
	bus and risers at Madison	AEP (100%)
	Replace the 2870 MCM	
b1435	ACSR riser at the Sporn	
	station	AEP (100%)
	Perform a sag study on the	
	Sorenson – Illinois Road 138	
b1436	kV line to increase the	
01130	emergency MOT for this line.	
	Replace bus and risers at	
	Illinois Road	AEP (100%)
	Perform sag study on Rock	
	Cr. – Hummel Cr. 138 kV to	
	increase the emergency MOT	
b1437	for the line, replace bus and	
01437	risers at Huntington J., and	
	replace relays for Hummel	
	Cr. – Hunt – Soren. Line at	
	Soren	AEP (100%)
	Replacement of risers at	
	McKinley and Industrial Park	
	stations and performance of a	
b1438	sag study for the 4.53 miles of	
01430	795 ACSR section is	
	expected to improve the	
	Summer Emergency rating to	
	335 MVA	AEP (100%)
	By replacing the risers at	
	Lincoln both the Summar	
b1439	Normal and Summer	
	Emergency ratings will	
	improve to 268 MVA	AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Ennancements	Annuai Revenue Requirement	Responsible Customer(s)
	By replacing the breakers at		
b1440	Lincoln the Summer		
	Emergency rating will		
	improve to 251 MVA		AEP (100%)
	Replacement of risers at		
	South Side and performance		
	of a sag study for the 1.91		
b1441	miles of 795 ACSR section is		
	expected to improve the		
	Summer Emergency rating to		
	335 MVA		AEP (100%)
	Replacement of 954 ACSR		
	conductor with 1033 ACSR		
b1442	and performance of a sag		
01442	study for the 4.54 miles of 2-		
	636 ACSR section is		
	expected		AEP (100%)
	Station work at Thelma and		
b1443	Busseyville Stations will be		
01443	performed to replace bus and		
	risers		AEP (100%)
	Perform electrical clearance		
	studies on Clinch River –		
b1444	Clinchfield 139 kV line		
01444	(a.k.a. sag studies) to		
	determine if the emergency		
	ratings can be utilized		AEP (100%)
	Perform a sag study on the		
	Addison (Buckeye CO-OP) –		
b1445	Thinever and North Crown		
	City – Thivener 138 kV sag		
	study and switch		AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Enhancements	Annuai Revenue Requirement	Responsible Customer(s)
	Perform a sag study on the		
b1446	Parkersburg (Allegheny		
01440	Power) – Belpre (AEP) 138		
	kV		AEP (100%)
1.1447	Dexter – Elliot tap 138 kV		
b1447	sag check		AEP (100%)
<b>L</b> 1440	Dexter – Meigs 138 kV		
b1448	Electrical Clearance Study		AEP (100%)
1-1440	Meigs tap – Rutland 138 kV		
b1449	sag check		AEP (100%)
	Muskingum – North		
b1450	Muskingum 138 kV sag		
	check		AEP (100%)
b1451	North Newark – Sharp Road		
01431	138 kV sag check		AEP (100%)
b1452	North Zanesville – Zanesville		
01432	138 kV sag check		AEP (100%)
	North Zanesville – Powelson		
b1453	and Ohio Central – Powelson	L	
	138 kV sag check		AEP (100%)
	Perform an electrical		
	clearance study on the Ross -		
b1454	Delano – Scioto Trail 138 kV		
01454	line to determine if the		
	emergency rating can be		
	utilized		AEP (100%)
	Perform a sag check on the		
	Sunny – Canton Central –		
b1455	Wagenhals 138 kV line to		
01100	determine if all circuits can b	e	
	operated at their summer		
	emergency rating		AEP (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Annual Revenue Requirement

Responsible Customer(s)

AEP (100%)

AEP (100%)

The Tidd – West Bellaire 345 kV circuit has been de-rated to its normal rating and would b1456 need an electrical clearance study to determine if the emergency rating can be utilized AEP (100%) The Tiltonsville – Windsor 138 kV circuit has been derated to its normal rating b1457 and would need an electrical clearance study to determine if the emergency rating could be utilized AEP (100%) Install three new 345 kV breakers at Bixby to separate the Marquis 345 kV line and transformer #2. Operate b1458 Circleville – Harrison 138 kV and Harrison – Zuber 138 kV up to conductor emergency ratings AEP (100%) Several circuits have been derated to their normal conductor ratings and could b1459 benefit from electrical clearance studies to determine if the emergency rating could be utilized AEP (100%) b1460 Replace 2156 & 2874 risers AEP (100%) Replace meter, metering CTs

and associated equipment at

Replace relays at both South Cadiz 138 kV and Tidd 138

the Paden City feeder

b1461

b1462

Required Transmission Enhancements

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 1	ransmission Ennancements A	annuai Revenue Requireme	ent 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		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

ransmission Enhancements A	nnual Revenue Requirement Responsible Customer(s)
	Load-Ratio Share Allocation:
	AEC (1.71%) / AEP (14.04%) / APS
	(5.61%) / ATSI (8.10%) / BGE
	(4.36%) / ComEd (13.14%) / Dayton
	(2.15%) / DEOK (3.23%) / DL
Transpose the Rockport –	(1.73%) / DPL (2.65%) / Dominion
Sullivan 765 kV line and the	(13.03%) / EKPC (1.77%) / JCPL
Rockport – Jefferson 765	(3.84%) / ME (1.93%) / NEPTUNE*
kV line	(0.45%) / OVEC (0.07%) / PECO
	(5.29%) / PENELEC (1.89%) /
	PEPCO (3.82%) / PPL (4.72%) /
	PSEG (6.21%) / RE (0.26%)
	DFAX Allocation:
	AEP (100%)
	Load-Ratio Share Allocation:
	AEC (1.71%) / AEP (14.04%) / APS
	(5.61%) / ATSI (8.10%) / BGE
	(4.36%) / ComEd (13.14%) / Dayton
	(2.15%) / DEOK (3.23%) / DL
Make switching	(1.73%) / DPL (2.65%) / Dominion
improvements at Sullivan	(13.03%) / EKPC (1.77%) / JCPL
and Jefferson 765 kV	(3.84%) / ME (1.93%) / NEPTUNE*
stations	(0.45%) / OVEC (0.07%) / PECO
	(5.29%) / PENELEC (1.89%) /
	PEPCO (3.82%) / PPL (4.72%) /
	PSEG (6.21%) / RE (0.26%)
	DFAX Allocation:
	AEP (100%)
Create an in and out loop at	
Adams Station by removing	
the hard tap that currently	
exists	AEP (100%)
Upgrade the Adams	
transformer to 90 MVA	AEP (100%)
	Transpose the Rockport – Sullivan 765 kV line and the Rockport – Jefferson 765 kV line  Make switching improvements at Sullivan and Jefferson 765 kV stations  Create an in and out loop at Adams Station by removing the hard tap that currently exists Upgrade the Adams

Required 1	ransmission Enhancements	Annual Revenue Requiremen	nt Responsible Customer(s)
	At Seaman Station install a		
b1466.3	new 138 kV bus and two		
	new 138 kV circuit breakers		AEP (100%)
	Convert South Central Co-		
b1466.4	op's New Market 69 kV		
	Station to 138 kV		AEP (100%)
	The Seaman – Highland		
	circuit is already built to		
b1466.5	138 kV, but is currently		
01400.3	operating at 69 kV, which		
	would now increase to 138		
	kV		AEP (100%)
	At Highland Station, install		
	a new 138 kV bus, three		
b1466.6	new 138 kV circuit breakers		
	and a new 138/69 kV 90		
	MVA transformer		AEP (100%)
	Using one of the bays at		
	Highland, build a 138 kV		
b1466.7	circuit from Hillsboro –		
	Highland 138 kV, which is		
	approximately 3 miles		AEP (100%)
	Install a 14.4 MVAr		
b1467.1	Capacitor Bank at New		
	Buffalo station		AEP (100%)
	Reconfigure the 138 kV bus		
	at LaPorte Junction station		
b1467.2	to eliminate a contingency		
01407.2	resulting in loss of two 138		
	kV sources serving the		
	LaPorte area		AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 1	ransmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
	Expand Selma Parker Station		
b1468.1	and install a 138/69/34.5 kV		
	transformer		AEP (100%)
	Rebuild and convert 34.5 kV		
b1468.2	line to Winchester to 69 kV,		
	including Farmland Station		AEP (100%)
b1468.3	Retire the 34.5 kV line from		
01408.3	Haymond to Selma Wire		AEP (100%)
	Conversion of the		
1.1460.1	Newcomerstown –		
b1469.1	Cambridge 34.5 kV system		
	to 69 kV operation		AEP (100%)
	Expansion of the Derwent 69	9	
b1469.2	kV Station (including		
01409.2	reconfiguration of the 69 kV		
	system)		AEP (100%)
	Rebuild 11.8 miles of 69 kV		
1-1460-2	line, and convert additional		
b1469.3	34.5 kV stations to 69 kV		
	operation		AEP (100%)
	Build a new 138 kV double		
1.1470.1	circuit off the Kanawha –		
b1470.1	Bailysville #2 138 kV circui	t	
	to Skin Fork Station		AEP (100%)
L1470.2	Install a new 138/46 kV		
b1470.2	transformer at Skin Fork		AEP (100%)
	Replace 5 Moab's on the		
b1470.3	Kanawha – Baileysville line		
014/0.3	with breakers at the Sundial		
	138 kV station		AEP (100%)
	Perform a sag study on the		. ,
	East Lima – For Lima –		
b1471	Rockhill 138 kV line to		
	increase the emergency		
	rating		AEP (100%)
	. – –		, ,

<sup>\*</sup>Neptune Regional Transmission System, LLC

required	Transmission Emiancements	Allitual Revenue Requirement	Responsible Cusionici(s)
	Perform a sag study on the		
b1472	East Lima – Haviland 138 kV		
	line to increase the		
	emergency rating		AEP (100%)
	Perform a sag study on the		
	East New Concord –		
b1473	Muskingum River section of		
	the Muskingum River – West		
	Cambridge 138 kV circuit		AEP (100%)
	Perform a sag study on the		
b1474	Ohio Central – Prep Plant tap		
	138 kV circuit		AEP (100%)
	Perform a sag study on the		
b1475	S73 – North Delphos 138 kV		
01473	line to increase the		
	emergency rating		AEP (100%)
	Perform a sag study on the		
b1476	S73 – T131 138 kV line to		
	increase the emergency rating		AEP (100%)
	The Natrium – North Martin		
	138 kV circuit would need an		
b1477	electrical clearance study		
	among other equipment		177 (1001)
	upgrades		AEP (100%)
1.4.50	Upgrade Strouds Run –		
b1478	Strounds Tap 138 kV relay		A ED (1000())
	and riser		AEP (100%)
b1479	West Hebron station upgrade	s	A ED (1000)
	1.0		AEP (100%)
	Perform upgrades and a sag		
1 1 400	study on the Corner –		
b1480	Layman 138 kV section of th	e	
	Corner – Muskingum River		AED (1000()
	138 kV circuit		AEP (100%)

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Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

Perform a sag study on the

		mindar revenue requirement	responsible editionier(s)
	Perform a sag study on the		
	West Lima – Eastown Road		
b1481	– Rockhill 138 kV line and		
	replace the 138 kV risers at		
	Rockhill station to increase		
	the emergency rating		AEP (100%)
	Perform a sag study for the		
b1482	Albion – Robison Park 138		
01402	kV line to increase its		
	emergency rating		AEP (100%)
	Sag study 1 mile of the		
	Clinch River – Saltville 138		
b1483	kV line and replace the risers		
01403	and bus at Clinch River,		
	Lebanon and Elk Garden		
	Stations		AEP (100%)
	Perform a sag study on the		
b1484	Hacienda – Harper 138 kV		
01404	line to increase the		
	emergency rating		AEP (100%)
	Perform a sag study on the		
b1485	Jackson Road - Concord		
01463	183 kV line to increase the		
	emergency rating		AEP (100%)
	The Matt Funk – Poages Mill		
b1486	– Starkey 138 kV line		
b1486	requires		AEP (100%)
	Perform a sag study on the		
L1407	New Carlisle – Trail Creek		
b1487	138 kV line to increase the		
	emergency rating		AEP (100%)
	Perform a sag study on the		
<b>L</b> 1400	Olive – LaPorte Junction 138		
b1488	kV line to increase the		
	emergency rating		AEP (100%)
-			

<sup>\*</sup>Neptune Regional Transmission System, LLC

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%)	rtequirea i	Tansimosion Emianecinents 7 mil	idai ite vende itequirement	responsible editioner(s)
b1490.1 Chadwick 138 kV line to determine if a higher emergency rating can be used  b1490.1 Establish a new 138/69 kV Butler Center station  Build a new 14 mile 138 kV line from Auburn station to Woods Road station VIA Butler Center station  Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/69 kV transformer  Improve the switching arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to increase its emergency abeliance in the same and the same		A sag study must be performed		
determine if a higher   emergency rating can be used		for the 5.40 mile Tristate –		
Establish a new 138/69 kV   Butler Center station	b1489	Chadwick 138 kV line to		
Establish a new 138/69 kV   Butler Center station   Build a new 14 mile 138 kV		determine if a higher		
Butler Center station		emergency rating can be used		AEP (100%)
Butler Center station	h1400 1	Establish a new 138/69 kV		
b1490.2   line from Auburn station to Woods Road station VIA Butler Center station	01490.1	Butler Center station		AEP (100%)
Solution   September   Septe		Build a new 14 mile 138 kV		
Woods Road station VIA Butler Center station Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer  Improve the switching arrangement at Kendallville station Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy — Busseyville 138 kV line Reconductor 0.65 miles of the Glen Lyn — Wythe 138 kV line with 3 — 1590 ACSR Perform a sag study for the Bellfonte — Grantston 138 kV line to increase its emergency rating Perform a sag study for the North Proctorville — Solida — Bellefonte 138 kV line to	h1400 2	line from Auburn station to		
Replace the existing 40 MVA 138/69 kV transformer at Auburn station with a 90 MVA 138/96 kV transformer  Improve the switching arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	01490.2	Woods Road station VIA		
b1490.3		Butler Center station		AEP (100%)
Auburn station with a 90 MVA 138/96 kV transformer  Improve the switching arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		Replace the existing 40 MVA		
Auburn station with a 90 MVA 138/96 kV transformer  Improve the switching arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	h1400 3			
Improve the switching arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	01490.3	Auburn station with a 90 MVA		
b1490.4 arrangement at Kendallville station  Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  B1491 Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		138/96 kV transformer		AEP (100%)
Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		Improve the switching		
Replace bus and risers at Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	b1490.4	arrangement at Kendallville		
Thelma and Busseyville stations and perform a sag study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		station		AEP (100%)
b1491 stations and perform a sag study for the Big Sandy — Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn — Wythe 138 kV line with 3 — 1590 ACSR  Perform a sag study for the Bellfonte — Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville — Solida — Bellefonte 138 kV line to		Replace bus and risers at		
study for the Big Sandy – Busseyville 138 kV line  Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		Thelma and Busseyville		
Busseyville 138 kV line Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	b1491			
Reconductor 0.65 miles of the Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to				
b1492 Glen Lyn – Wythe 138 kV line with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		Busseyville 138 kV line		AEP (100%)
with 3 – 1590 ACSR  Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to		Reconductor 0.65 miles of the		
b1493 Perform a sag study for the Bellfonte – Grantston 138 kV line to increase its emergency rating AEP (100%)  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	b1492	Glen Lyn – Wythe 138 kV line		
b1493 Bellfonte – Grantston 138 kV line to increase its emergency rating AEP (100%)  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to				AEP (100%)
line to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to  AEP (100%)				
b1494 Inne to increase its emergency rating  Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	h1/103	Bellfonte – Grantston 138 kV		
Perform a sag study for the North Proctorville – Solida – Bellefonte 138 kV line to	01473			
b1494 North Proctorville – Solida – Bellefonte 138 kV line to				AEP (100%)
Bellefonte 138 kV line to				
Bellefonte 138 kV line to	h1/19/1			
increase its emergency rating AEP (100%)	U1494	Bellefonte 138 kV line to		
		increase its emergency rating		AEP (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) AEC (0.41%) / AEP (87.22%) / BGE (1.03%) / ComEd (3.38%) / Dayton (1.23%) / DL (1.46%) / DPL (0.54%) / JCPL (0.90%) / Add an additional 765/345 kV b1495 transformer at Baker Station NEPTUNE (0.09%) / HTP (0.04%) / PECO (1.18%) / PEPCO (0.94%) / ECP\*\* (0.04%) / PSEG (1.48%) / RE (0.06%) Replace 138 kV bus and risers b1496 at Johnson Mountain Station AEP (100%) Replace 138 kV bus and risers b1497 at Leesville Station AEP (100%) Replace 138 kV risers at b1498 Wurno Station AEP (100%) Perform a sag study on Sporn A – Gavin 138 kV to b1499 determine if the emergency rating can be improved AEP (100%) The North East Canton – Wagenhals 138 kV circuit would need an electrical b1500 clearance study to determine if the emergency rating can be utilized AEP (100%) The Moseley – Reusens 138 kV circuit requires a sag study

AEP (100%)

for a category C3

rating can be utilized to

b1501

to determine if the emergency

address a thermal loading issue

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Required Transmission Ennancements Annual Revenue Requirement			ment Responsible Customer(s)
	Reconductor the Conesville		
	East – Conesville Prep		
b1502	Plant Tap 138 kV section of		
01302	the Conesville – Ohio		
	Central to fix Reliability N-		
	1-1 thermal overloads		AEP (100%)
			AEP (93.61%) / ATSI (2.99%) /
	Establish Sorenson 345/138		ComEd (2.07%) / HTP (0.03%) /
b1659	kV station as a 765/345 kV		PENELEC (0.31%) / ECP**
	station		(0.03%) / PSEG (0.92%) / RE
			(0.04%)
b1659.1	Replace Sorenson 138 kV		
01039.1	breaker 'L1'		AEP (100%)
h1650.2	Replace Sorenson 138 kV		
b1659.2	breaker 'L2' breaker		AEP (100%)
1.1650.2	Replace Sorenson 138 kV		
b1659.3	breaker 'M1'		AEP (100%)
1.1650.4	Replace Sorenson 138 kV		
b1659.4	breaker 'M2'		AEP (100%)
1.1650.5	Replace Sorenson 138 kV		
b1659.5	breaker 'N1'		AEP (100%)
1.1650.6	Replace Sorenson 138 kV		
b1659.6	breaker 'N2'		AEP (100%)
1 1 650 5	Replace Sorenson 138 kV		, ,
b1659.7	breaker 'O1'		AEP (100%)
1 4 6 5 0 0	Replace Sorenson 138 kV		, ,
b1659.8	breaker 'O2'		AEP (100%)
1.4.650.0	Replace Sorenson 138 kV		` /
b1659.9	breaker 'M'		AEP (100%)
	Replace Sorenson 138 kV		(/
b1659.10	breaker 'N'		AEP (100%)
			1121 (10070)

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b1659.11	Replace Sorenson 138 kV	Responsible Customer(s)
01039.11	breaker 'O'	AEP (100%)
b1659.12	Replace McKinley 138 kV	
01039.12	breaker 'L1'	AEP (100%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
	Establish 765 kV ward at	(2.65%) / Dominion (13.03%) /
b1659.13	Establish 765 kV yard at Sorenson and install four	EKPC (1.77%) / JCPL (3.84%) /
01039.13	765 kV breakers	ME (1.93%) / NEPTUNE*
	703 KV bleakers	(0.45%) / OVEC (0.07%) / PECO
		(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		AEP (75.95%) / Dayton (7.52%) /
		DEOK (12.77%) / EKPC (3.76%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
	Build approximately 14	(2.65%) / Dominion (13.03%) /
	miles of 765 kV line from	EKPC (1.77%) / JCPL (3.84%) /
b1659.14	existing Dumont -	ME (1.93%) / NEPTUNE*
	Marysville line	(0.45%) / OVEC (0.07%) / PECO
	112411	(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		AEP (71.06%) / ATSI (15.95%) /
		Dayton (7.10%) / DL (4.84%) /
1		EKPC (0.77%) / OVEC (0.28%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required T	ransmission Enhancements	Annual Revenue Requirem	nent Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) / APS
			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
			(2.15%) / DEOK (3.23%) / DL
			(1.73%) / DPL (2.65%) / Dominion
			(13.03%) / EKPC (1.77%) / JCPL
b1660	Install a 765/500 kV		(3.84%) / ME (1.93%) / NEPTUNE*
01000	transformer at Cloverdale		(0.45%) / OVEC (0.07%) / PECO
			(5.29%) / PENELEC (1.89%) /
			PEPCO (3.82%) / PPL (4.72%) /
			PSEG (6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			Dayton (8.37%) / DEOK (21.94%) /
			Dominion (56.40%) / EKPC
			(13.29%)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) / APS
			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
			(2.15%) / DEOK (3.23%) / DL
	Install a 765 kV circuit		(1.73%) / DPL (2.65%) / Dominion
b1661	breaker at Wyoming		(13.03%) / EKPC (1.77%) / JCPL
01001	station		(3.84%) / ME (1.93%) / NEPTUNE*
	station		(0.45%) / OVEC (0.07%) / PECO
			(5.29%) / PENELEC (1.89%) /
			PEPCO (3.82%) / PPL (4.72%) /
			PSEG (6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			AEP (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Rebuild 4 miles of 46 kV line to 138 kV from b1662 Pemberton to Cherry Creek AEP (100%) Circuit Breakers are installed at Cherry Creek (facing Pemberton) and at b1662.1 Pemberton (facing Tams Mtn. and Cherry Creek) AEP (100%)

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		Tesponsione customer(s)
	Install three 138 kV	
h1662.2	breakers at Grandview	
b1662.2	Station (facing Cherry	
	Creek, Hinton, and Bradley	A ED (1000/)
	Stations)	AEP (100%)
b1662.3	Remove Sullivan Switching	4 FD (1000)
	Station (46 kV)	AEP (100%)
1.1.660	Install a new 765/138 kV	
b1663	transformer at Jackson Ferry	4 FD (100%)
	substation	AEP (100%)
	Establish a new 10 mile	
b1663.1	double circuit 138 kV line	
	between Jackson Ferry and	1 TD (1000)
	Wythe	AEP (100%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) / APS
		(5.61%) / ATSI (8.10%) / BGE
	Install 2 765 kV circuit	(4.36%) / ComEd (13.14%) / Dayton
	breakers, breaker disconnect	(2.15%) / DEOK (3.23%) / DL
	switches and associated bus	(1.73%) / DPL (2.65%) / Dominion
b1663.2	work for the new 765 kV	(13.03%) / EKPC (1.77%) / JCPL
	breakers, and new relays for	(3.84%) / ME (1.93%) / NEPTUNE*
	the 765 kV breakers at	(0.45%) / OVEC (0.07%) / PECO
	Jackson's Ferry	(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		AEP (100%)
11664	Install switched capacitor	
b1664	banks at Kenwood 138 kV	A FID (1000())
	stations	AEP (100%)
1165	Install a second 138/69 kV	
b1665	transformer at Thelma	1 TD (1000)
	station	AEP (100%)
	Construct a single circuit 69	
b1665.1	kV line from West	
31000.1	Paintsville to the new	. == (100=1)
	Paintsville station	AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

b1665.2	Install new 7.2 MVAR, 46	•	
01003.2	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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Trequired 1		responsible editorier(s)
b1683	Replace Kammer 138 kV breaker 'N'	AEP (100%)
	Replace Clinch River 138 kV	2222 (20070)
b1684	breaker 'E1'	AEP (100%)
		ALI (10070)
b1685	Replace Lincoln 138 kV breaker 'D'	AED (1000/)
		AEP (100%)
1.1.607	Advance s0251.7 (Replace	
b1687	Corrid 138 kV breaker	A FID (1000())
	'104S')	AEP (100%)
	Advance s0251.8 (Replace	
b1688	Corrid 138 kV breaker	
	'104C')	AEP (100%)
	Perform sag study on	
b1712.1	Altavista - Leesville 138 kV	Dominion (75.30%) / PEPCO
	line	(24.70%)
	Rebuild the	
b1712.2	Altavista - Leesville 138 kV	Dominion (75.30%) / PEPCO
	line	(24.70%)
	Perform a sag study of the	
	Bluff Point - Jauy 138 kV	
b1733	line. Upgrade breaker,	
	wavetrap, and risers at the	
	terminal ends	AEP (100%)
	Perform a sag study of	
1.170.4	Randoph - Hodgins 138 kV	
b1734	line. Upgrade terminal	
	equipment	AEP (100%)
	Perform a sag study of R03 -	(200,0)
b1735	Magely 138 kV line.	
01/00	Upgrade terminal equipment	AEP (100%)
	Perform a sag study of the	1121 (10070)
b1736	Industrial Park - Summit 138	
01/50	kV line	AEP (100%)
	Sag study of	TLI (10070)
	Newcomerstown - Hillview	
b1737	138 kV line. Upgrade -	
	1	A ED (1000/)
	terminal equipment	AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required	Transmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
	Perform a sag study of the		
	Wolf Creek - Layman 138 kV	7	
b1738	lineUpgrade terminal		
	equipment including a 138		
	kV breaker and wavetrap		AEP (100%)
	Perform a sag study of the		
b1739	Ohio Central - West Trinway		
	138 kV line		AEP (100%)
1 17/1	Replace Beatty 138 kV		
01/41	breaker '2C(IPP)'		AEP (100%)
1.17.40	Replace Beatty 138 kV		
61/42	breaker '1E'		AEP (100%)
1 1742	Replace Beatty 138 kV		` ,
61/43	breaker '2E'		AEP (100%)
1 17744	Replace Beatty 138 kV		, ,
b1744	breaker '3C'		AEP (100%)
1.45.45	Replace Beatty 138 kV		
	breaker '2W'		AEP (100%)
1.17.46	Replace St. Claire 138 kV		
b1/46	breaker '8'		AEP (100%)
1 17 47	Replace Cloverdale 138 kV		, , ,
b1/4/	breaker 'C'		AEP (100%)
1.17.40	Replace Cloverdale 138 kV		` ,
b1/48	breaker 'D1'		AEP (100%)
	Install two 138kV breakers		
	and two 138kV circuit		
	switchers at South Princeton		
b1780	Station and one 138kV		
	breaker and one 138kV		
	circuit switcher at Switchbac	k	
	Station		AEP (100%)
	Install three 138 kV breakers		` ,
1.1701	and a 138kV circuit switcher		
01/81	at Trail Fork Station in		
	Pineville, WV		AEP (100%)
		· · · · · · · · · · · · · · · · · · ·	

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 1	ransmission Enhancements	Annuai Revenue Requiremen	it Responsible Customer(s)
	Install a 46kV Moab at		
b1782	Montgomery Station facing		
01762	Carbondale (on the London	-	
	Carbondale 46 kV circuit)		AEP (100%)
	Add two 138 kV Circuit		
	Breakers and two 138 kV		
b1783	circuit switchers on the		
	Lonesome Pine - South		
	Bluefield 138 kV line		AEP (100%)
	Install a 52.8 MVAR		
b1784	capacitor bank at the Clifford	d	
	138 kV station		AEP (100%)
	Perform a sag study of 4		
b1811.1	miles of the Waterford -		
	Muskingum line		AEP (100%)
	Rebuild 0.1 miles of		
b1811.2	Waterford - Muskingum 345		
b1811.2	kV with 1590 ACSR		AEP (100%)
	Reconductor the AEP portio	n	
	of the South Canton -		
	Harmon 345 kV with 954		
b1812	ACSR and upgrade terminal		
01012	equipment at South Canton.		
	Expected rating is 1800		
	MVA S/N and 1800 MVA		
	S/E		AEP (100%)
	Install (3) 345 kV circuit		
b1817	breakers at East Elkhart		
0101/	station in ring bus designed		
	as a breaker and half scheme		AEP (100%)

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		 1
	Expand the Allen station by installing a second 345/138 kV	
	transformer and adding four 138	
b1818	kV exits by cutting in the	
	Lincoln - Sterling and Milan -	
	Timber Switch 138 kV double	AEP (88.30%) / ATSI (8.86%) /
	circuit tower line	Dayton (2.84%)
	Rebuild the Robinson Park -	
	Sorenson 138 kV line corridor as	
b1819	a 345 kV double circuit line with	
	one side operated at 345 kV and	AEP (87.18%) / ATSI (10.06%) /
	one side at 138 kV	Dayton (2.76%)
	Perform a sag study for Hancock	
	- Cave Spring - Roanoke 138 kV	
	circuit to reach new SE ratings	
b1859	of 272MVA (Cave Spring-	
	Hancock), 205MVA (Cave	
	Spring-Sunscape), 245MVA	
	(ROANO2-Sunscape)	AEP (100%)
	Perform a sag study on the	
	Crooksville - Spencer Ridge	
	section (14.3 miles) of the	
b1860	Crooksville-Poston-Strouds Run	
	138 kV circuit to see if any	
	remedial action needed to reach	
	the SE rating (175MVA)	AEP (100%)
	Reconductor 0.83 miles of the	
b1861	Dale - West Canton 138 kV Tie-	
01001	line and upgrade risers at West	
	Canton 138 kV	AEP (100%)
	Perform a sag study on the Grant	
	- Greentown 138 kV circuit and	
b1862	replace the relay CT at Grant	
01002	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 1		Annual Revenue Requireme	ili Responsible Cusiomer(s)
	Perform a sag study of the		
b1863	II		
	action needed to reach the		
	new SE rating of 284MVA		AEP (100%)
b1864.1	Add two additional 345/138		AEP (87.22%) / APS (8.22%) /
01004.1	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  864.1 Add two additional 345/138 kV transformers at Kammer  864.2 Add second West Bellaire - Brues 138 kV circuit  864.3 Replace Kammer 138 kV breaker 'E'  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  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.RDorton 138kV line to 310 and upgrade the risers with 1590ACSR  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  Perform sag study on the East Lima - new Liberty 138 kV line to see if any remedial action is needed to reach the		ATSI (3.52%) / DL (1.04%)
b1864.2			AEP (87.22%) / APS (8.22%) /
01004.2	Brues 138 kV circuit		ATSI (3.52%) / DL (1.04%)
b1864.3	Replace Kammer 138 kV		
01004.3	*		AEP (100%)
	Perform a sag study on the		
b1865			
			AEP (100%)
	,		
b1866	1 1		
01000			
	10		
			AEP (100%)
	<u> </u>		
b1867		:	
01007	1		
			AEP (100%)
	<u> </u>		
b1868			
	new SE rating of 219MVA		AEP (100%)

Required	ransmission Ennancements	Annuai Revenue Requireme	ent Responsible Customer(s)
	Perform a sag study of the		
	Ohio Central - South		
h1960	Coshocton 138 kV circuit to		
b1869	see if any remedial action		
	needed to reach the new SE		
	ratings of 250MVA		AEP (100%)
	Replace the Ohio Central		
	transformer #1 345/138/12		
b1870	kV 450 MVA for a		AEP (68.16%) / ATSI (25.27%) /
	345/138/34.5 kV 675 MVA		Dayton (3.88%) / PENELEC
	transformer		(1.59%) / DEOK (1.10%)
	Perform a sag study on the		
	Central - West Coshocton		
b1871	138 kV line (improving the		
	emergency rating of this line		
	to 254 MVA)		AEP (100%)
	Add a 57.6 MVAr capacitor		
b1872	bank at East Elkhart 138 kv		
	station in Indiana		AEP (100%)
	Install two 138 kV circuit		
	breakers at Cedar Creek		
b1873	Station and primary side		
	circuit switcher on the		
	138/69/46 kV transformer		AEP (100%)

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1100		umuai Nevenae Requireme	it 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%)
	Build 25 miles of new 138 kV		
	line from Bradley Station		
	through Tower 117 Station		
b1875	and terminating at McClung		
01073	138 kV station. Existing 69		
	kV distribution transformers		
	will be replaced with 138 kV		
	transformers		APS (100%)
	Install a 14.4 MVAr capacitor		
b1876	bank at Capital Avenue		
01070	(AKA Currant Road) 34.5 kV		
	bus		AEP (100%)
	Relocate 138 kV Breaker G to		
b1877	the West Kingsport - Industry		
01077	Drive 138 kV line and		
	Remove 138 kV MOAB		AEP (100%)
	Perform a sag study on the		
	Lincoln - Robinson Park 138		
b1878	kV line (Improve the		
	emergency rating to 244		
	MVA)		AEP (100%)
	Perform a sag study on the		
	Hansonville - Meadowview		
b1879	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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required	Transmission Emancements Am	idai Kevende Requireme	iii Responsible Customer(s)
	Replace existing 600 Amp		
b1881	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%)
	Perform a sag study on the Bluff		
	Point - Randolf 138 kV line to		
b1882	see if any remedial action needed		
	to reach the new SE rating of 255	5	
	MVA		AEP (100%)
	Switch the breaker position of		
b1883	transformer #1 and SW Lima at		
	East Lima 345 kV bus		AEP (100%)
	Perform a sag study on Strawton		
	station - Fisher Body - Deer		
b1884	Creek 138 kV line to see if any		
	remedial action needed to reach		
	the new SE rating of 250 MVA		AEP (100%)
	Establish a new 138/69 kV sourc	e	
	at Carrollton and construct two		
b1887	new 69 kV lines from Carrollton		
01007	to tie into the Dennison - Miller		
	SW 69 kV line and to East Dover	r	
	69 kV station respectively		AEP (100%)
	Install a 69 kV line breaker at		
b1888	Blue Pennant 69 kV Station		
	facing Bim Station and 14.4		
	MVAr capacitor bank		AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

		1	1 (/
b1889	Install a 43.2 MVAR capacitor		
	bank at Hinton 138 kV station		
	(APCO WV)		AEP (100%)
	Rebuild the Ohio Central - West		
	Trinway (4.84 miles) section of		
b1901	the Academia - Ohio Central 138		
01701	kV circuit. Upgrade the Ohio		
	Central riser, Ohio Central switch		
	and the West Trinway riser		AEP (100%)
	Construct new 138/69 Michiana		
	Station near Bridgman by tapping		
b1904.1	the new Carlisle - Main Street		
	138 kV and the Bridgman -		
	Buchanan Hydro 69 kV line		AEP (100%)
	Establish a new 138/12 kV New		
b1904.2	Galien station by tapping the		
01904.2	Olive - Hickory Creek 138 kV		
	line		AEP (100%)
	Retire the existing Galien station		
	and move its distribution load to		
b1904.3	New Galien station. Retire the		
	Buchanan Hydro - New Carlisile		
	34.5 kV line		AEP (100%)
	Implement an in and out scheme		
	at Cook 69 kV by eliminating the		
b1904.4	Cook 69 kV tap point and by		
	installing two new 69 kV circuit		
	breakers		AEP (100%)
	Rebuild the Bridgman - Cook 69		
b1904.5	kV and the Derby - Cook 69 kV		
	lines		AEP (100%)
b1946	Perform a sag study on the Brues		
01940	– West Bellaire 138 kV line		AEP (100%)
	A sag study of the Dequine -		
h1047	Meadowlake 345 kV line #1 line		
b1947	may improve the emergency		
	rating to 1400 MVA		AEP (100%)

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1	Establish a new 765/345	1	
	interconnection at Sporn.		
b1948	Install a 765/345 kV		
	transformer at Mountaineer		ATSI (61.08%) / DL (21.87%) /
	and build 34 mile of 345 kV to		Dominion (13.97%) / PENELEC
			(3.08%)
	Sporn		(3.08%)
	Perform a sag study on the		
b1949	Grant Tap – Deer Creek 138		
	kV line and replace bus and		A FID (1000())
	risers at Deer Creek station		AEP (100%)
	Perform a sag study on the		
b1950	Kammer – Ormet 138 kV line		
	of the conductor section		AEP (100%)
	Perform a sag study of the		
b1951	Maddox- Convoy 345 kV line		
01931	to improve the emergency		
	rating to 1400 MVA		AEP (100%)
	Perform a sag study of the		
1-1050	Maddox – T130 345 kV line		
b1952	to improve the emergency		
	rating to 1400 MVA		AEP (100%)
	Perform a sag study of the		
	Meadowlake - Olive 345 kV		
b1953	line to improve the		
01700	emergency rating to 1400		
	MVA		AEP (100%)
	Perform a sag study on the		1111 (10070)
b1954	Milan - Harper 138 kV line		
	and replace bus and switches		
	at Milan Switch station		AEP (100%)
	Perform a sag study of the R-		ALI (100%)
	049 - Tillman 138 kV line		
b1955			
	may improve the emergency		A ED (1000/)
	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%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC Add four 765 kV breakers at b1962 (1.77%) / JCPL (3.84%) / ME Kammer (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** AEP (100%) Build approximately 1 mile of circuit comprising of 2-954 ACSR to get the rating of b1963 Waterford-Muskinum 345 kV higher AEP (100%) APS (33.51%) / ATSI (32.21%) / DL (18.64%) / Dominion (6.01%) / Reconductor 13 miles of the ECP\*\* (0.10%) / HTP (0.11%) / b1970 Kammer – West Bellaire JCPL (1.68%) / Neptune\* (0.18%) 345kV circuit / PENELEC (4.58%) / PSEG (2.87%) / RE (0.11%) Perform a sag study to improve the emergency rating b1971 on the Bridgville -Chandlersville 138 kV line AEP (100%) Replace disconnect switch on b1972 the South Canton 765/345 kV transformer AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required	Tansinission Emiancements	Ailluai Revenue Requireme	the Responsible Customer(s)
	Perform a sag study to		
b1973	improve the emergency		
	rating on the Carrollton –		
	Sunnyside 138 kV line		AEP (100%)
	Perform a sag study to		
b1974	improve the emergency		
01974	rating on the Bethel Church	_	
	West Dover 138 kV line		AEP (100%)
b1975	Replace a switch at South		
01973	Millersburg switch station		AEP (100%)
			ATSI (37.04%) / AEP (34.35%) /
	Reconductor or rebuild		DL (10.41%) / Dominion (6.19%)
	Sporn - Waterford -		/ APS (3.94%) / PENELEC
b2017	Muskingum River 345 kV		(3.09%) / JCPL (1.39%) / Dayton
	line		(1.20%) / Neptune* (0.14%) /
	ine		HTP (0.09%) / ECP** (0.08%) /
			PSEG (2.00%) / RE (0.08%)
			ATSI (58.58%) / AEP (14.16%) /
b2018	Loop Conesville - Bixby 34 kV circuit into Ohio Centra	5	APS (12.88%) / DL (7.93%) /
02018			PENELEC (5.73%) / Dayton
			(0.72%)
	Establish Burger 345/138 k	7	AEP (93.74%) / APS (4.40%) /
b2019	station		DL (1.11%) / ATSI (0.74%) /
	Station		PENELEC (0.01%)
	Rebuild Amos - Kanawah		AEP (88.39%) / APS (7.12%) /
b2020	River 138 kV corridor		ATSI (2.89%) / DEOK (1.58%) /
	River 138 KV Corridor		PEPCO (0.02%)
	Add 345/138 transformer at		AEP (91.92%) / DEOK (3.60%) /
b2021	Sporn, Kanawah River &		APS (2.19%) / ATSI (1.14%) /
02021	Muskingum River stations		DL (1.08%) / PEPCO (0.04%) /
	Wuskinguin River stations		BGE (0.03%)
b2021.1	Replace Kanawah 138 kV		
02021.1	breaker 'L'		AEP (100%)
b2021.2	Replace Muskingum 138 kV		
b2021.2	breaker 'HG'		AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

<sup>\*\*</sup>East Coast Power, L.L.C.

		 nt responsible editioner(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 Sport	AEP (97.99%) / DEOK (2.01%)
b2027	Perform a sag study of the Tidd - Collier 345 kV line	AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

rtequired	Transmission Linuarections 13	inidal Revenue Requireme	it Responsible editionier(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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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 Emancements A	Allitual Revenue Requirement	Responsible Customer(s)
1.00.00	Replace George Washington		
b2069	138 kV breaker 'A' with 63kA		
	rated breaker		AEP (100%)
	Replace Harrison 138 kV		
b2070	breaker '6C' with 63kA rated		
	breaker		AEP (100%)
	Replace Lincoln 138 kV		
b2071	breaker 'L' with 63kA rated		
	breaker		AEP (100%)
	Replace Natrum 138 kV		
b2072	breaker 'I' with 63kA rated		
	breaker		AEP (100%)
	Replace Darrah 138 kV		,
b2073	breaker 'B' with 63kA rated		
	breaker		AEP (100%)
	Replace Wyoming 138 kV		
b2074	breaker 'G' with 80kA rated		
	breaker		AEP (100%)
	Replace Wyoming 138 kV		(
b2075	breaker 'G1' with 80kA rated		
	breaker		AEP (100%)
	Replace Wyoming 138 kV		1122 (10070)
b2076	breaker 'G2' with 80kA rated		
02070	breaker		AEP (100%)
	Replace Wyoming 138 kV		1121 (10070)
b2077	breaker 'H' with 80kA rated		
02077	breaker		AEP (100%)
	Replace Wyoming 138 kV		1121 (10070)
b2078	breaker 'H1' with 80kA rated		
02070	breaker		AEP (100%)
	Replace Wyoming 138 kV		(100/0)
b2079	breaker 'H2' with 80kA rated		
32017	breaker		AEP (100%)
	Replace Wyoming 138 kV		1111 (10070)
b2080	breaker 'J' with 80kA rated		
02000	breaker		AEP (100%)
	orcarci		ALI (100/0)

<sup>\*</sup>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 Emiancements	Ailliuai Revenue Requirement	Responsible Cusionier(s)
	Replace Wyoming 138 kV		
b2081	breaker 'J1' with 80kA rated		
	breaker		AEP (100%)
	Replace Wyoming 138 kV		
b2082	breaker 'J2' with 80kA rated		
	breaker		AEP (100%)
	Replace Natrum 138 kV		
b2083	breaker 'K' with 63kA rated		
	breaker		AEP (100%)
	Replace Tanner Creek 345		` ,
b2084	kV breaker 'P' with 63kA		
	rated breaker		AEP (100%)
	Replace Tanner Creek 345		,
b2085	kV breaker 'P2' with 63kA		
	rated breaker		AEP (100%)
	Replace Tanner Creek 345		,
b2086	kV breaker 'Q1' with 63kA		
	rated breaker		AEP (100%)
	Replace South Bend 138 kV		·
b2087	breaker 'T' with 63kA rated		
	breaker		AEP (100%)
1.0000	Replace Tidd 138 kV breake	er	·
b2088	'L' with 63kA rated breaker		AEP (100%)
1.0000	Replace Tidd 138 kV breake	er	,
b2089	'M2' with 63kA rated breake		AEP (100%)
	Replace McKinley 138 kV		. ,
b2090	breaker 'A' with 40kA rated		
	breaker		AEP (100%)
	Replace West Lima 138 kV		. ,
b2091	breaker 'M' with 63kA rated		
	breaker		AEP (100%)
	Replace George Washington		(
b2092	138 kV breaker 'B' with 63k.		
	rated breaker		AEP (100%)
		į .	\ - * / * /

<sup>\*</sup>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	Amuai Kevenue Kequireme	nt Responsible Customer(s)
	Replace Turner 138 kV		
b2093	breaker 'W' with 63kA rated		
	breaker		AEP (100%)
	Build a new 138 kV line from	1	
	Falling Branch to Merrimac		
b2135	and add a 138/69 kV		
	transformer at Merrimac		
	Station		AEP (100%)
	Add a fourth circuit breaker		
	to the station being built for		
b2160	the U4-038 project		
02100	(Conelley), rebuild U4-038 -		
	Grant Tap line as double		
	circuit tower line		AEP (100%)
	Rebuild approximately 20		
	miles of the Allen - S073		
	double circuit 138 kV line		
b2161	(with one circuit from Allen	-	
02101	Tillman - Timber Switch -		
	S073 and the other circuit		
	from Allen - T-131 - S073)		
	utilizing 1033 ACSR		AEP (100%)
	Perform a sag study to		
b2162	improve the emergency rating		
02102	of the Belpre - Degussa 138		
	kV line		AEP (100%)
h2163	Replace breaker and wavetra	9	
b2163	at Jay 138 kV station		AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

#### **SCHEDULE 12 – APPENDIX**

#### (20) Virginia Electric and Power Company

required	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
	Upgrade Mt. Storm -	EKPC (1.77%) / JCPL (3.84%) /
b0217	Doubs 500kV	ME (1.93%) / NEPTUNE*
	Bodos Sook v	(0.45%) / OVEC (0.07%) / PECO
		(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		APS (21.37%) / BGE (9.63%) /
		Dominion (59.60%) / PEPCO
		(9.40%)
		I J D-4'- Cl All4'
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) /
		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK
		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
	Install 150 MVAR	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0222	capacitor at Loudoun 500	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0222		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0222	capacitor at Loudoun 500	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0222	capacitor at Loudoun 500	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0222	capacitor at Loudoun 500	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0222	capacitor at Loudoun 500	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0222	capacitor at Loudoun 500	AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>\*\*\*</sup> 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.

b0223	Install 150 MVAR capacitor at Asburn 230 kV	Î	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%)

Required I	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
	Install 500 kV breakers &	(2.65%) / Dominion (13.03%) /
b0231	500 kV bus work at	EKPC (1.77%) / JCPL (3.84%) /
	Suffolk	ME (1.93%) / NEPTUNE*
		(0.45%) / OVEC (0.07%) / PECO
		(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		Dominion (100%)
	Install 500/230 kV	
	Transformer, 230 kV	
	breakers, & 230 kV bus	
b0231.2	work at Suffolk	Dominion (100%)
	Install 150 MVAR	
b0232	capacitor at Lynnhaven	
	230 kV	Dominion (100%)
	Install 150 MVAR	
b0233	capacitor at Landstown	
	230 kV	Dominion (100%)
	Install 150 MVAR	
b0234	capacitor at Greenwich	
	230 kV	Dominion (100%)
	Install 150 MVAR	
b0235	capacitor at Fentress 230	
	kV	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

ransmission Enhancements	Ailliual Nevellue Ne	equirement Responsible Customer(s)
Reconductor Endless		
Caverns – Mt. Jackson		
115 kV		Dominion (100%)
Replace L breaker and		
switches at Endless		
Caverns 115 kV		Dominion (100%)
Install SPS at Earleys 115		
kV		Dominion (100%)
Reconductor Club House		
– South Hill and Chase		
City – South Hill 115 kV		Dominion (100%)
Reconductor Idylwood to		
		Dominion (100%)
Reconductor Gallows to		
Ox 230 kV		Dominion (100%)
Install a 2 <sup>nd</sup> Everetts		
		Dominion (100%)
kV		Dominion (100%)
Puild 2nd Harrisonburg		
_		APS (19.79%) / Dominion
Valley 230 KV		(76.18%) / PEPCO (4.03%)
		<b>Load-Ratio Share Allocation:</b>
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
Build new Meadow Brook		(2.65%) / Dominion (13.03%) /
		EKPC (1.77%) / JCPL (3.84%) /
		ME (1.93%) / NEPTUNE*
		(0.45%) / OVEC (0.07%) / PECO
		(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		Dominion (100%)
	Reconductor Endless Caverns – Mt. Jackson 115 kV Replace L breaker and switches at Endless Caverns 115 kV Install SPS at Earleys 115 kV Reconductor Club House – South Hill and Chase City – South Hill 115 kV Reconductor Idylwood to Arlington 230 kV Reconductor Gallows to	Reconductor Endless Caverns – Mt. Jackson 115 kV Replace L breaker and switches at Endless Caverns 115 kV Install SPS at Earleys 115 kV Reconductor Club House – South Hill and Chase City – South Hill 115 kV Reconductor Idylwood to Arlington 230 kV Reconductor Gallows to Ox 230 kV Install a 2 <sup>nd</sup> Everetts 230/115 kV transformer Uprate/resag Remington- Brandywine-Culppr 115 kV  Build 2 <sup>nd</sup> Harrisonburg – Valley 230 kV  Build 2 <sup>nd</sup> Harrisonburg – Valley 230 kV

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required I	ransmission Enhancements A	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
b0328.3	Upgrade Mt. Storm 500	EKPC (1.77%) / JCPL (3.84%) /
00320.3	kV substation	ME (1.93%) / NEPTUNE*
		(0.45%) / OVEC (0.07%) / PECO
		(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		APS (43.43%) / Dominion
		(56.57%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
	Upgrade Loudoun 500 kV	/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
b0328.4	substation	EKPC (1.77%) / JCPL (3.84%) /
	substation	ME (1.93%) / NEPTUNE*
		(0.45%) / OVEC (0.07%) / PECO
		(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

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		<b>Load-Ratio Share Allocation:</b>
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
	Build Carson – Suffolk	(3.23%) / DL (1.73%) / DPL
	500 kV, install 2 <sup>nd</sup> Suffolk	(2.65%) / Dominion (13.03%) /
b0329	500/230 kV transformer &	EKPC (1.77%) / JCPL (3.84%) /
	build Suffolk – Fentress	ME (1.93%) / NEPTUNE*
	230 kV circuit	(0.45%) / OVEC (0.07%) / PECO
		(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		Dominion (100%)
	Replace Thole Street 115	
b0329.1	kV breaker '48T196'	D :: (1000()
	K V OTCAKET 401170	Dominion (100%)
b0329.2	Replace Chesapeake 115	
00327.2	kV breaker 'T242'	Dominion (100%)
	Replace Chesapeake 115	. ,
b0329.3	kV breaker '8722'	D :: (1000()
	RV OTCARCT 8/22	Dominion (100%)
b0329.4	Replace Chesapeake 115	
00329.4	kV breaker '16422'	Dominion (100%)
	Install 2 <sup>nd</sup> Suffolk 500/230	2 011111011 (10070)
	kV transformer & build	
b0329.5	Suffolk – Thrasher 230	
	kV circuit	Dominion (100%)††
	Install Crewe 115 kV	2011111011 (10070)
b0330	breaker and shift load	
00330	from line 158 to 98	Dominion (100%)
	Upgrade/resag Shell Bank	Dominion (10070)
b0331	- Whealton 115 kV (Line	
00331	165)	Dominion (100%)
	103)	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

<sup>†</sup>Cost allocations associated with Regional Facilities and Necessary Lower Voltage Facilities associated with the project

<sup>††</sup>Cost allocations associated with below 500 kV elements of the project

required		minual 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 Dooms 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> Dooms 500/230 kV transformer addition		APS (3.35%) / BGE (4.22%) / DPL (1.10%) / Dominion (83.94%) / PEPCO (7.39%)

Required I	ransmission Ennancements Ann	iuai Revenue Requirement	1
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) / APS
			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
			(2.15%) / DEOK (3.23%) / DL
			(1.73%) / DPL (2.65%) / Dominion
	Retension Pruntytown – Mt.		(13.03%) / EKPC (1.77%) / JCPL
b0412	Storm 500 kV to a 3502		(3.84%) / ME (1.93%) / NEPTUNE*
	MVA rating		(0.45%) / OVEC (0.07%) / PECO
			(5.29%) / PENELEC (1.89%) /
			PEPCO (3.82%) / PPL (4.72%) /
			PSEG (6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			APS (53.81%) / DEOK (17.91%) /
			PEPCO (28.28%)
	Install 150 MVAR		
b0450	Capacitor at Fredricksburg		
	230 kV		Dominion (100%)
b0451	Install 25 MVAR Capacitor		
00431	at Somerset 115 kV		Dominion (100%)
	Install 150 MVAR		
b0452	Capacitor at Northwest 230		
	kV		Dominion (100%)
	Convert Remingtion –		APS (0.31%) / BGE (3.01%) / DPL
b0453.1	Sowego 115 kV to 230 kV		(0.04%) / Dominion (92.75%) / ME
	50Wego 113 KV to 230 KV		(0.03%) / PEPCO (3.86%)
	Add Sowego – Gainsville		APS (0.31%) / BGE (3.01%) / DPL
b0453.2	230 kV		(0.04%) / Dominion (92.75%) / ME
	250 K V		(0.03%) / PEPCO (3.86%)
	Add Sowego 230/115 kV		APS (0.31%) / BGE (3.01%) / DPL
b0453.3	transformer		(0.04%) / Dominion (92.75%) / ME
			(0.03%) / PEPCO (3.86%)
	Reconductor 2.4 miles of		
b0454	Newport News -		
	Chuckatuck 230 kV		Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 1	Required Transmission Ennancements 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%) /		
	230/113 KV transformer	PEPCO (7.67%)		
	Reconductor 9.4 miles of	APS (33.69%) / BGE (12.18%) /		
b0456	Edinburg – Mt. Jackson 115	Dominion (40.08%) / PEPCO		
	kV	(14.05%)		
		Load-Ratio Share Allocation:		
		AEC (1.71%) / AEP (14.04%) / APS		
		(5.61%) / ATSI (8.10%) / BGE		
		(4.36%) / ComEd (13.14%) / Dayton		
		(2.15%) / DEOK (3.23%) / DL		
		(1.73%) / DPL (2.65%) / Dominion		
L0457	Replace both wave traps on	(13.03%) / EKPC (1.77%) / JCPL		
b0457	Dooms – Lexington 500 kV	(3.84%) / ME (1.93%) / NEPTUNE*		
		(0.45%) / OVEC (0.07%) / PECO		
		(5.29%) / PENELEC (1.89%) /		
		PEPCO (3.82%) / PPL (4.72%) /		
		PSEG (6.21%) / RE (0.26%)		
		DFAX Allocation:		
		Dominion (99.00%) / EKPC (1.00%)		
		AEC (1.75%) / APS (19.70%) / BGE		
	Reconductor the Dickerson	(22.13%) / DPL (3.70%) / JCPL		
b0467.2	– Pleasant View 230 kV	(0.71%) / ME (2.48%) / Neptune*		
	circuit	(0.06%) / PECO (5.54%) / PEPCO		
		(41.86%) / PPL (2.07%)		

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / Replace Mount Storm 500 b0492.6 kV breaker 55072 PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** 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%)**Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO Replace Mount Storm 500 (5.29%) / PENELEC (1.89%) / b0492.7 kV breaker 55172 PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** 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%)

Required 11		Annuai Revenue Requirei	1
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) / APS
			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
			(2.15%) / DEOK (3.23%) / DL
			(1.73%) / DPL (2.65%) / Dominion
			(13.03%) / EKPC (1.77%) / JCPL
			(3.84%) / ME (1.93%) / NEPTUNE*
	Replace Mount Storm		(0.45%) / OVEC (0.07%) / PECO
	500 kV breaker		(5.29%) / PENELEC (1.89%) /
b0492.8	H1172-2		PEPCO (3.82%) / PPL (4.72%) /
	1111/2-2		PSEG (6.21%) / RE (0.26%)
			DFAX Allocation:
			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%)
			<b>Load-Ratio Share Allocation:</b>
			<b>Load-Ratio Share Allocation:</b> AEC (1.71%) / AEP (14.04%) / APS
			AEC (1.71%) / AEP (14.04%) / APS
			AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE
			AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton
			AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL
			AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion
			AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL
	Replace Mount Storm		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO
b0492.9	500 kV breaker		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) /
b0492.9	-		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) /
b0492.9	500 kV breaker		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)
b0492.9	500 kV breaker		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation:
b0492.9	500 kV breaker		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (5.01%) / AEP (4.39%) / APS
b0492.9	500 kV breaker		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation:  AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%)
b0492.9	500 kV breaker		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%)
b0492.9	500 kV breaker		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: 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%) /
b0492.9	500 kV breaker		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation:  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
b0492.9	500 kV breaker		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: 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
b0492.9	500 kV breaker		AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation:  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

<sup>\*</sup> Neptune Regional Transmission System, LLC

Trequired 11		7 miliaar Revenue Require	riient Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) / APS
			(5.61%) / ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) / Dayton
			(2.15%) / DEOK (3.23%) / DL
			(1.73%) / DPL (2.65%) / Dominion
			(13.03%) / EKPC (1.77%) / JCPL
			(3.84%) / ME (1.93%) / NEPTUNE*
	Replace Mount		(0.45%) / OVEC (0.07%) / PECO
b0492.10	Storm 500 kV		(5.29%) / PENELEC (1.89%) /
00192.10	breaker G2T554		PEPCO (3.82%) / PPL (4.72%) /
	oreaker G21331		PSEG (6.21%) / 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%) /
			DCEC (15 000) / DE (0 500/)
			PSEG (15.86%) / RE (0.59%)
			Load-Ratio Share Allocation:
			<b>Load-Ratio Share Allocation:</b> AEC (1.71%) / AEP (14.04%) / APS
			<b>Load-Ratio Share Allocation:</b> AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL
			Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE*
	Replace Mount		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO
b0/192 11	Replace Mount Storm 500 kV		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) /
b0492.11	-		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) /
b0492.11	Storm 500 kV		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) /
b0492.11	Storm 500 kV		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation:
b0492.11	Storm 500 kV		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (5.01%) / AEP (4.39%) / APS
b0492.11	Storm 500 kV		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%)
b0492.11	Storm 500 kV		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: AEC (5.01%) / AEP (4.39%) / APS (9.26%) / BGE (4.43%) / DL (0.02%) / DPL (6.91%) / Dominion (10.82%) /
b0492.11	Storm 500 kV		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: 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%) /
b0492.11	Storm 500 kV		Load-Ratio Share Allocation:  AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: 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%)
b0492.11	Storm 500 kV		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: 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%) /

<sup>\*</sup> Neptune Regional Transmission System, LLC

Tequired 11		Load-Ratio Share Allocation	
			-
		AEC (1.71%) / AEP (14.04%)	
		(5.61%) / ATSI (8.10%) / Be	
		(4.36%) / ComEd (13.14%) / D	5
		(2.15%) / DEOK (3.23%) / I	
		(1.73%) / DPL (2.65%) / Dom	
	Upgrade nameplate rating	(13.03%) / EKPC (1.77%) / Jo	
	of Mount Storm 500 kV	(3.84%) / ME (1.93%) / NEPT	UNE*
		(0.45%) / OVEC (0.07%) / PI	ECO
b0402 12	breakers 55472, 57272,	(5.29%) / PENELEC (1.89%)	ó)/
b0492.12	SX172, G3TSX1,	PEPCO (3.82%) / PPL (4.729)	%)/
	G1TH11, G3T572, and	PSEG (6.21%) / RE (0.26%	6)
	SX22	DFAX Allocation:	
		AEC (5.01%) / AEP (4.39%) /	APS
		(9.26%) / BGE (4.43%) / DL (0	0.02%)
		/ DPL (6.91%) / Dominion (10.90)	,
		JCPL (11.64%) / ME (2.94%	,
		NEPTUNE (1.12%) / PECO (14	,
		/ PEPCO (6.11%) / PPL (6.39	
		PSEG (15.86%) / RE (0.599	,
		AEC (1.71%) / AEP (14.04%)	
	MAPP Project – install	(5.61%) / ATSI (8.10%) / BO	
		(4.36%) / ComEd (13.14%) / D	
	new 500 kV transmission	(2.15%) / DEOK (3.23%) / I	•
	from Possum Point to	(1.73%) / DPL (2.65%) / Dom	
b0512	Calvert Cliffs and install	(13.03%) / EKPC (1.77%) / John	
00312	a DC line from Calvert	(3.84%) / ME (1.93%) / NEPT	
	Cliffs to Vienna and a DC	(0.45%) / OVEC (0.07%) / PE	
	line from Calvert Cliffs to	(5.29%) / PENELEC (1.89%)	
	Indian River	PEPCO (3.82%) / PPL (4.72°)	,
		` '	
		PSEG (6.21%) / RE (0.26%	0)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install dual primary protection schemes on Gosport lines 62 and 51 at b0583 the remote terminals Dominion (100%) (Chesapeake on the 62 line and Reeves Ave on the 51 line) Install a second 500/115 b0756 kV autotransformer at Dominion (100%) Chancellor 500 kV **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / Install two 500 kV EKPC (1.77%) / JCPL (3.84%) / b0756.1 breakers at Chancellor 500 ME (1.93%) / NEPTUNE\* kV(0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Requirea	I ransmission Ennancements	Annual Revenue Requirement	Responsible Customer(s)
	Reconductor one mile of		
b0757	Chesapeake – Reeves		
	Avenue 115 kV line		Dominion (100%)
	Install a second		
b0758	Fredericksburg 230/115		
	kV autotransformer		Dominion (100%)
	Build 115 kV line from		
	Kitty Hawk to Colington		
b0760	115 kV (Colington on the		
00/60	existing line and Nag's		
	Head and Light House DF		
	on new line)		Dominion (100%)
	Install a second 230/115		
b0761	kV transformer at Possum	1	
	Point		Dominion (100%)
	Build a new Elko station		,
1.07.60	and transfer load from		
b0762	Turner and Providence		
	Forge stations		Dominion (100%)
	Rebuild 17.5 miles of the		
b0763	line for a new summer		
	rating of 262 MVA		Dominion (100%)
	Increase the rating on 2.56	5	
	miles of the line between		
b0764	Greenwich and Thompson	1	
	Corner; new rating to be		
	257 MVA		Dominion (100%)
	Add a second Bull Run		
b0765	230/115 kV		
	autotransformer		Dominion (100%)
	Increase the rating of the		
1.0766	line between Loudoun and	1	
b0766	Cedar Grove to at least		
	150 MVA		Dominion (100%)
	Extend the line from Old		` /
b0767	Church – Chickahominy		
	230 kV		Dominion (100%)
			` ,

<sup>\*</sup> Neptune Regional Transmission System, LLC

required 1	Tarishinssion Elinancements F	annuai Kevenue Kequitement	Responsible Customer(s)
1.05.60	Loop line #251 Idylwood		
b0768	– Arlington into the GIS		
	sub		Dominion (100%)
	Re-tension 15 miles of the		
b0769	line for a new summer		
	rating of 216 MVA		Dominion (100%)
b0770	Add a second 230/115 kV		
00770	autotransformer at Lanexa		Dominion (100%)
1.0770.1	Replace Lanexa 115 kV		
b0770.1	breaker '8532'		Dominion (100%)
	Replace Lanexa 115 kV		( ) ( )
b0770.2	breaker '9232'		Dominion (100%)
	Build a parallel		Dominion (100%)
b0771	Chickahominy – Lanexa		
00771	230 kV line		Dominion (100%)
	Install a second Elmont		Dominion (10070)
b0772	230/115 kV		
00772	autotransformer		Dominion (100%)
	Replace Elmont 115 kV		Dominion (10070)
b0772.1	breaker '7392'		Daminian (1000/)
			Dominion (100%)
b0774	Install a 33 MVAR		
	capacitor at Bremo 115 kV		Dominion (100%)
	Reconductor the		
	Greenwich – Virginia		
	Beach line to bring it up to		
b0775	a summer rating of 261		
00113	MVA; Reconductor the		
	Greenwich – Amphibious		
	Base line to bring it up to		
	291 MVA		Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 1	I ransmission Ennancements	Annuai Revenue Requireme	ent 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		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b0785	Rebuild the Chase City – Crewe 115 kV line		Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Enhancements Ar	nnual Revenue Requiremen	t Responsible Customer(s)
b0786	Reconductor the Moran DP – Crewe 115 kV		
00700	segment		Dominion (100%)
	Upgrade the Chase City –		, , ,
b0787	Twitty's Creek 115 kV		
	segment		Dominion (100%)
	Reconductor the line from		
b0788	Farmville – Pamplin 115		D (1000)
	kV		Dominion (100%)
	Close switch 145T183 to		
1.0702	network the lines. Rebuild		
b0793	the section of the line #145		
	between Possum Point – Minnieville DP 115 kV		Dominion (100%)
			Dominion (100%)
b0815	Replace Elmont 230 kV breaker '22192'		D ' ' (1000/)
			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		
00010	breaker '2009T2032'		Dominion (100%)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
	At Mt. Storm, replace the		(2.65%) / Dominion (13.03%) /
b0837	existing MOD on the 500		EKPC (1.77%) / JCPL (3.84%) /
	kV side of the transformer		ME (1.93%) / NEPTUNE*
	with a circuit breaker		(0.45%) / OVEC (0.07%) /
			PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(4.72%)/ TSEG (0.21%)/ RE (0.26%)
		-	DFAX Allocation:
			Dominion (100%)
	ı		\ /-

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Ennancements	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 1		Annuai Revenue Requirement	Responsible Customer(s)
	Install 50-100 MVAR		
	variable reactor banks at		
	Carolina, Dooms,		
b0928	Everetts, Idylwood, N.		
	Alexandria, N. Anna,		
	Suffolk and Valley 230		
	kV substations		Dominion (100%)
b1056	Build a 2nd Shawboro –		
01030	Elizabeth City 230kV line		Dominion (100%)
	Add a third 230/115 kV		
b1058	transformer at Suffolk		
	substation		Dominion (100%)
	Replace Suffolk 115 kV		
b1058.1	breaker 'T122' with a 40		
	kA breaker		Dominion (100%)
	Convert Suffolk 115 kV		
	straight bus to a ring bus		
b1058.2	for the three 230/115 kV		
	transformers and three 115		
	kV lines		Dominion (100%)
	Rebuild the existing 115		
	kV corridor between		
b1071	Landstown - Va Beach		
01071	Substation for a double		
	circuit arrangement (230		
	kV & 115 kV)		Dominion (100%)
	Replace existing North		
b1076	Anna 500-230kV		
01070	transformer with larger		
	unit		Dominion (100%)
	Replace Cannon Branch		
b1087	230-115 kV with larger		
01007	transformer		
			Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required	Transmission Emiancements	Allituai Revenue Requirement	Responsible Customer(s)
	Build new Radnor Heights		
	Sub, add new underground		
	circuit from Ballston -		
	Radnor Heights, Tap the		
b1088	Glebe - Davis line and		
	create circuits from Davis -		
	Radnor Heights and Glebe		
	- Radnor Heights		
			Dominion (100%)
	Install 2nd Burke to		
b1089	Sideburn 230 kV		
01009	underground cable		
			Dominion (100%)
	Install a 150 MVAR 230		
b1090	kV capacitor and one 230		
01090	kV breaker at Northwest		
			Dominion (100%)
	Reconductor Chase City		
b1095	115 kV bus and add a new		
	tie breaker		Dominion (100%)
	Construct 10 mile double		
b1096	ckt. 230kV tower line		
01070	from Loudoun to		
	Middleburg		Dominion (100%)
b1102	Replace Bremo 115 kV		
01102	breaker '9122'		Dominion (100%)
1 1 1 0 0	Replace Bremo 115 kV		
b1103	breaker '822'		Dominion (100%)
	Build a 4-6 mile long 230		(/
1 1 1 7 0	kV line from Hopewell to		
b1172	Bull Hill (Ft Lee) and		
	install a 230-115 kV Tx		Dominion (100%)
	·	1	` /

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 1	ransmission Ennancements A	nnual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
	Build new Brambleton	(3.23%) / DL (1.73%) / DPL
	500 kV three breaker ring	(2.65%) / Dominion (13.03%) /
b1188	bus connected to the	EKPC (1.77%) / JCPL (3.84%) /
01100	Loudoun to Pleasant View	ME (1.93%) / NEPTUNE*
	500 kV line	(0.45%) / OVEC (0.07%) /
	JOO KV IIIIE	PECO (5.29%) / PENELEC
		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		Dominion (100%)
	Replace Loudoun 230 kV	
b1188.1	breaker '200852' with a	
	63 kA breaker	Dominion (100%)
	Replace Loudoun 230 kV	
b1188.2	breaker '2008T2094' with	
	a 63 kA breaker	Dominion (100%)
	Replace Loudoun 230 kV	
b1188.3	breaker '204552' with a	
	63 kA breaker	Dominion (100%)
	Replace Loudoun 230 kV	
b1188.4	breaker '209452' with a	
	63 kA breaker	Dominion (100%)
	Replace Loudoun 230 kV	
b1188.5	breaker 'WT2045' with a	
	63 kA breaker	Dominion (100%)
	Install one 500/230 kV	AEC (0.22%) / BGE (7.90%) /
b1188.6	transformer and two 230	DPL (0.59%) / Dominion
01100.0	kV breakers at	(75.58%) / ME (0.22%) / PECO
	Brambleton	(0.73%) / PEPCO (14.76%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required	Transmission Eduarcements A	Allituat Kevenue Kequitemen	i 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%) /
	1		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%)
	Reconfigure 115 kV bus at		<b>Dominion</b> (10070)
1.1206	Endless Caverns substation such that the existing two		
b1306	230/115 kV transformers at Endless Caverns operate		
	in		Dominion (100%)
	Install a 2nd 230/115 kV		
b1307	transformer at Northern		
	Neck Substation		Dominion (100%)
	Improve LSE's power		( 22.27)
	factor factor in zone to		
1.1200	.973 PF, adjust LTC's at		
b1308	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required	Tansinission Emancements A	Ainuai Kevenue Kequirement	Responsible Customer(s)
b1310	Install a 115 kV breaker at Broadnax substation on the		
	South Hill side of		
	Broadnax		Dominion (100%)
	Install a 230 kV 3000 amp		
b1311	breaker at Cranes Corner		
01311	substation to sectionalize		
	the 2104 line into two lines		Dominion (100%)
	Loop the 2054 line in and		
	out of Hollymeade and		
b1312	place a 230 kV breaker at		
01312	Hollymeade. This creates		
	two lines: Charlottesville -		
	Hollymeade		Dominion (100%)
	Resag wire to 125C from		
	Chesterfield – Shockoe		
b1313	and replace line switch		
01010	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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Convert line #64		
b1315	Trowbridge to Winfall to		
	230 kV and install a 230		
	kV capacitor bank at		
	Winfall		Dominion (100%)
	Rebuild 10.7 miles of 115		
b1316	kV line #80, Battleboro –		
	Heartsease DP		Dominion (100%)
	LSE load power factor on		
	the #47 line will need to		
1 1 2 1 7	meet MOA requirements		
b1317	of .973 in 2015 to further		
	resolve this issue through		
	at least 2019		Dominion (100%)
	Install a 115 kV bus tie		
1-1210	breaker at Acca substation		
b1318	between the Line #60 and		
	Line #95 breakers		Dominion (100%)
	Resag line #222 to 150 C		,
	and upgrade any		
1-1210	associated equipment to a		
b1319	2000A rating to achieve a		
	706 MVA summer line		
	rating		Dominion (100%)
	Install a 230 kV, 150		
b1320	MVAR capacitor bank at		
	Southwest substation		Dominion (100%)
	Build a new 230 kV line		
	North Anna – Oak Green		
b1321	and install a 224 MVA		
	230/115 kV transformer at		BGE (0.85%) / Dominion
	Oak Green		(97.96%) / PEPCO (1.19%)
	Rebuild the 39 Line		
b1322	(Dooms – Sherwood) and		
	the 91 Line (Sherwood –		
	Bremo)		Dominion (100%)
	Install a 224 MVA		. ,
	230/115 kV transformer at		
b1323	Staunton. Rebuild the 115		
	kV line #43 section		
	Staunton - Verona		Dominion (100%)
		•	` '

<sup>\*</sup> Neptune Regional Transmission System, LLC

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%)
	Rebuild 15 miles of line		
b1325	#2020 Winfall – Elizabeth		
01323	City with a minimum 900		
	MVA rating		Dominion (100%)
	Install a third 168 MVA		
	230/115 kV transformer at		
b1326	Kitty Hawk with a		
01320	normally open 230 kV		
	breaker and a low side 115		
	kV breaker		Dominion (100%)
	Rebuild the 20 mile		
b1327	section of line #22		
01327	between Kerr Dam –		
	Eatons Ferry substations		Dominion (100%)
	Uprate the 3.63 mile line		
	section between Possum		
b1328	and Dumfries substations,		AEC (0.66%) / APS (3.59%) /
	replace the 1600 amp		DPL (0.91%) / Dominion
	wave trap at Possum Point		(92.94%) / PECO (1.90%)
	Install line-tie breakers at		
b1329	Sterling Park substation		
	and BECO substation		Dominion (100%)
	Install a five breaker ring		
	bus at the expanded Dulles		
h1220	substation to accommodate		
b1330	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%)
1 1000	Build Cannon Branch to		, ,
b1332	Nokesville 230 kV line		Dominion (100%)
L			Dominion (10070)

<sup>\*</sup> Neptune Regional Transmission System, LLC

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

<sup>\*</sup> Neptune Regional Transmission System, LLC

rtequirea	Tarishinssion Emianecinches A	inidai revende requirement	responsible Customer(s)
	At Gainesville Substation,		
b1506.1	create two 115 kV		
	straight-buses with a		
	normally open tie-breaker		Dominion (100%)
	Upgrade Line 124 (radial		
	from Loudoun) to a		
	minimum continuous		
b1506.2	rating of 500 MVA and		
	network it into the 115 kV		
	bus feeding NOVEC's DP		
	at Gainesville		Dominion (100%)
	Install two additional 230		
	kV breakers in the ring at		
	Gainesville (may require		
b1506.3	substation expansion) to		
	accommodate conversion		
	of NOVEC's Gainesville		
	to Wheeler line		Dominion (100%)
	Convert NOVEC's		
	Gainesville-Wheeler line		
	from 115 kV to 230 kV		
1.1506.4	(will require Gainsville		
b1506.4	DP Upgrade replacement		
	of three transformers total		
	at Atlantic and Wheeler		
	Substations)		Dominion (100%)

Required 1	ransmission Ennancements A	innual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
		EKPC (1.77%) / JCPL (3.84%) /
b1507	Rebuild Mt Storm –	ME (1.93%) / NEPTUNE*
01307	Doubs 500 kV	(0.45%) / OVEC (0.07%) /
		PECO (5.29%) / PENELEC
		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		APS (21.37%) / BGE (9.63%) /
		Dominion (59.60%) / PEPCO
		(9.40%)
	Build a 2nd 230 kV Line	
b1508.1	Harrisonburg to Endless	APS (37.05%) / Dominion
	Caverns	(62.95%)
b1508.2	Install a 3rd 230-115 kV	APS (37.05%) / Dominion
01300.2	Tx at Endless Caverns	(62.95%)
	Upgrade a 115 kV shunt	
b1508.3	capacitor banks at Merck	APS (37.05%) / Dominion
	and Edinburg	(62.95%)
b1536	Advance n1752 (Replace	
	OX 230 breaker 24342	
	with an (63kA breaker)	Dominion (100%)
	Advance n1753 (Replace	
b1537	OX 230 breaker	
01337	243T2097 with an 63kA	
	breaker)	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	I ransmission Ennancements A	nnual Revenue Requiremer	nt 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		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b1648	Upgrade name plate rating at Morrisville 500kV breaker 'H2T545' with 50kA breaker		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Emiancements A	minual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
	Danlage Mamieville	(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
b1649	Replace Morrisville 500kV breaker 'H1T580'	EKPC (1.77%) / JCPL (3.84%) /
01049	with 50kA breaker	ME (1.93%) / NEPTUNE*
	willi JOKA DIEAKEI	(0.45%) / OVEC (0.07%) /
		PECO (5.29%) / PENELEC
		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		Dominion (100%)
	Replace Morrisville 500kV breaker 'H2T569' with 50kA breaker	Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
b1650		EKPC (1.77%) / JCPL (3.84%) /
01030		ME (1.93%) / NEPTUNE*
		(0.45%) / OVEC (0.07%) /
		PECO (5.29%) / PENELEC
		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		Dominion (100%)
	Replace Loudoun 230kV	
b1651	breaker '295T2030' with	
	63kA breaker	Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

required	Transmission Enhancements	Annuai Revenue Requiremen	it Responsible Customer(s)
	Replace Ox 230kV		
b1652	breaker '209742' with		
	63kA breaker		Dominion (100%)
	Replace Clifton 230kV		
b1653	breaker '26582' with		
	63kA breaker		Dominion (100%)
	Replace Clifton 230kV		
b1654	breaker '26682' with		
	63kA breaker		Dominion (100%)
	Replace Clifton 230kV		
b1655	breaker '205182' with		
	63kA breaker		Dominion (100%)
	Replace Clifton 230kV		
b1656	breaker '265T266' with		
	63kA breaker		Dominion (100%)
	Replace Clifton 230kV		
b1657	breaker '2051T2063' with		
	63kA breaker		Dominion (100%)
b1694	Rebuild Loudoun - Brambleton 500 kV		Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
b1696	Install a breaker and a half scheme with a minimum of eight 230 kV breakers for five existing lines at Idylwood 230 kV		(78.91%) / PEPCO (10.05%) 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%)

rtequired i	Tarismission Emancements 7	inuai Revenue Requirement Responsible Eustomer(s)
		AEC (1.35%) / APS (15.65%) /
	Build a 2nd	BGE (10.53%) / DPL (2.59%) /
	Clark - Idylwood 230 kV	Dominion (46.97%) / JCPL
b1697	line and install 230 kV	(2.36%) / ME (1.91%) /
	gas-hybrid breakers at	NEPTUNE* (0.23%) / PECO
	Clark	(4.48%) / PEPCO (11.23%) /
		PSEG (2.59%) / RE (0.11%)
	Install a 2nd 500/230 kV	APS (4.21%) / BGE (13.28%) /
b1698	transformer at Brambleton	DPL (1.09%) / Dominion
	transformer at Brambleton	(59.38%) / PEPCO (22.04%)
	Install a 500 kV breaker at Brambleton	Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
b1698.1		EKPC (1.77%) / JCPL (3.84%) /
01096.1		ME (1.93%) / NEPTUNE*
		(0.45%) / OVEC (0.07%) /
		PECO (5.29%) / PENELEC
		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Tarishinssion Emianecinches	Allitual Revenue Requirement	responsible Customer(s)
Replace Brambleton 230		
kV breaker '2094T2095'		Dominion (100%)
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%)
Install a 230/115 kV		
transformer at the new		
Liberty substation to		
relieve Gainesville		
Transformer #3		Dominion (100%)
Reconductor line #2104		APS (8.66%) / BGE (10.95%) /
(Fredericksburg - Cranes		Dominion (63.30%) / PEPCO
Corner 230 kV)		(17.09%)
Install a 2nd 138/115 kV		
transformer at Edinburg		Dominion (100%)
Replace the 115/34.5 kV		
transformer #1 at Hickory		
with a 230/34.5 kV		
transformer		Dominion (100%)
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%)
	Replace Brambleton 230 kV breaker '2094T2095' Reconfigure Line #203 to feed Edwards Ferry sub radial from Pleasant View 230 kV and install new breaker bay at Pleasant View Sub Install a 230/115 kV transformer at the new Liberty substation to relieve Gainesville Transformer #3 Reconductor line #2104 (Fredericksburg - Cranes Corner 230 kV) Install a 2nd 138/115 kV transformer at Edinburg Replace the 115/34.5 kV transformer #1 at Hickory with a 230/34.5 kV transformer 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	Replace Brambleton 230 kV breaker '2094T2095' Reconfigure Line #203 to feed Edwards Ferry sub radial from Pleasant View 230 kV and install new breaker bay at Pleasant View Sub Install a 230/115 kV transformer at the new Liberty substation to relieve Gainesville Transformer #3 Reconductor line #2104 (Fredericksburg - Cranes Corner 230 kV) Install a 2nd 138/115 kV transformer at Edinburg Replace the 115/34.5 kV transformer #1 at Hickory with a 230/34.5 kV transformer 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

<sup>\*</sup> Neptune Regional Transmission System, LLC

	•	iuai Revenue Requirement	Responsible Customer(s)
	Install a 230/115 kV		
b1730	transformer at a new		
	Liberty substation		Dominion (100%)
	Uprate or rebuild Four		
	Rivers – Kings Dominion		
b1731	115 kV line or Install		
01731	capacitors or convert load		
	from 115 kV system to		
	230 kV system		Dominion (100%)
	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%)
	Wreck and rebuild 2.1		
b1791	mile section of Line #11		APS (5.83%) / BGE (6.25%) /
	section between		Dominion (78.38%) / PEPCO
	Gordonsville and Somerset		(9.54%)
	Rebuild line #33 Halifax		
b1792	to Chase City, 26 miles.		
01792	Install 230 kV 4 breaker		
	ring bus		Dominion (100%)
	Wreck and rebuild		
	remaining section of Line		
b1793	#22, 19.5 miles and		
	replace two pole H frame		
	construction built in 1930		Dominion (100%)
	Split 230 kV Line #2056		
	(Hornertown - Rocky		
	Mount) and double tap line		
b1794	to Battleboro Substation.		
U1/34	Expand station, install a		
	230 kV 3 breaker ring bus		
	and install a 230/115 kV		
	transformer		Dominion (100%)

Required'	Fransmission Enhancements	Annual Revenue Requirer	ment Responsible Customer(s)
	Reconductor segment of		
b1795	Line #54 (Carolina to		
01773	Woodland 115 kV) to a		
	minimum of 300 MVA		Dominion (100%)
	Install 115 kV 25 MVAR		
b1796	capacitor bank at Kitty		
	Hawk Substation		Dominion (100%)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
	Wreck and rebuild 7 miles		EKPC (1.77%) / JCPL (3.84%) /
b1797	of the Dominion owned		ME (1.93%) / NEPTUNE*
01/5/	section of Cloverdale -		(0.45%) / OVEC (0.07%) / PECO
	Lexington 500 kV		(5.29%) / PENELEC (1.89%) /
			PEPCO (3.82%) / PPL (4.72%) /
			PSEG (6.21%) / RE (0.26%)
			DFAX Allocation:
			AEP (0.79%) / APS (53.70%) /
			Dayton (0.15%) / DEOK (0.40%)
			/ Dominion (1.13%) / EKPC
			(0.23%) / PEPCO (43.60%)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
	Build a 450 MVAR SVC		(3.23%) / DL (1.73%) / DPL
b1798	and 300 MVAR switched		(2.65%) / Dominion (13.03%) /
01/98	shunt at Loudoun 500 kV		EKPC (1.77%) / JCPL (3.84%) /
			ME (1.93%) / NEPTUNE*
			(0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) /
			PEPCO (3.82%) / PPL (4.72%) /
			PSEG (6.21%) / RE (0.26%)
			DFAX Allocation:
			Dominion (100%)
			Dominion (10070)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Emancements	Allitual Revenue Requirem	ent Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
	Build 150 MVAR		EKPC (1.77%) / JCPL (3.84%) /
b1799	Switched Shunt at		ME (1.93%) / NEPTUNE*
01777	Pleasant View 500 kV		(0.45%) / OVEC (0.07%) / PECO
	Tiedsdift view 500 KV		(5.29%) / PENELEC (1.89%) /
			PEPCO (3.82%) / PPL (4.72%) /
		_	PSEG (6.21%) / RE (0.26%)
			DFAX Allocation:
			APS (1.22%) / DPL (0.33%) /
			Dominion (91.89%) / EKPC
			(5.42%) / ME (0.31%) / PEPCO
			(0.83%)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
	Install a 250 MVAR		(2.65%) / Dominion (13.03%) /
b1805	SVC at the existing Mt.		EKPC (1.77%) / JCPL (3.84%) /
	Storm 500kV substation		ME (1.93%) / NEPTUNE*
			(0.45%) / OVEC (0.07%) / PECO
			(5.29%) / PENELEC (1.89%) /
			PEPCO (3.82%) / PPL (4.72%) /
		<u>_</u>	PSEG (6.21%) / RE (0.26%)
			DFAX Allocation:
			APS (78.44%) / PEPCO (21.56%)
b1809	Replace Brambleton 230		
01007	kV Breaker '22702'		Dominion (100%)
L1010	Replace Brambleton 230		
b1810	kV Breaker '227T2094'		Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required 1	ransmission Enhancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
	Surry to Skiffes Creek	(2.65%) / Dominion (13.03%) /
b1905.1	500 kV Line (7 miles	EKPC (1.77%) / JCPL (3.84%) /
	overhead)	ME (1.93%) / NEPTUNE*
		(0.45%) / OVEC (0.07%) / PECO
		(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		Dominion (100%)
		Load-Ratio Share Allocation:
	Surry 500 kV Station Work	AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
b1905.2		EKPC (1.77%) / JCPL (3.84%) /
		ME (1.93%) / NEPTUNE*
		(0.45%) / OVEC (0.07%) / PECO
		(5.29%) / PENELEC (1.89%) /
		PEPCO (3.82%) / PPL (4.72%) /
		PSEG (6.21%) / RE (0.26%)
		DFAX Allocation:
		Dominion (100%)
	Skiffes Creek 500-230	
b1905.3		Dominion (99.84%) / PEPCO
	Station	(0.16%)
b1905.4	New Skiffes Creek -	Dominion (99.84%) / PEPCO
01703.4	Whealton 230 kV line	(0.16%)
h1905 5	Whealton 230 kV	Dominion (99.84%) / PEPCO
	breakers	(0.16%)
	l	()

<sup>\*</sup> Neptune Regional Transmission System, LLC

1104011001		7 Hilliadi Revende Requirement Responsione 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	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)
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%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Enhancements	Annual Revenue Requiremen	1
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd (13.14%)
			/ Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion (13.03%) /
	Dahwild Lawin aton		EKPC (1.77%) / JCPL (3.84%) /
b1908	Rebuild Lexington – Dooms 500 kV		ME (1.93%) / NEPTUNE*
	Dooms 300 k v		(0.45%) / OVEC (0.07%) /
			PECO (5.29%) / PENELEC
			(1.89%) / PEPCO (3.82%) / PPL
			(4.72%) / PSEG (6.21%) / RE
			(0.26%)
			DFAX Allocation:
			Dominion (99.00%) / EKPC
			(1.00%)
	Uprate Bremo –		
b1909	Midlothian 230 kV to its		APS (6.31%) / BGE (3.81%) /
01303	maximum operating		Dominion (81. 90%) / PEPCO
	temperature		(7.98%)
	Build a Suffolk – Yadkin		
b1910	230 kV line (14 miles)		
	and install 4 breakers		Dominion (100%)
	Add a second Valley		APS (14.85%) / BGE (3.10%) /
b1911	500/230 kV TX		Dominion (74.12%) / PEPCO
	300/230 KV 17X		(7.93%)
b1912	Install a 500 MVAR SVC		DEOK (0.46%) / Dominion
01912	at Landstown 230 kV		(99.54%)
1.0050	D 1 3120 3 11		
b2053	Rebuild 28 mile line		AEP (100%)
	Install four additional 230		( 3 3 1 7 )
	kV 100 MVAR variable		
	shunt reactor banks at		
b2125	Clifton, Gallows Road,		
	Garrisonville, and		
	Virginia Hills substations		Dominion (100%)
	Install two additional 230		` /
	kV 100 MVAR variable		
b2126	shunt reactor banks at		
	Churchland and		
	Shawboro substations		Dominion (100%)
1	<u> </u>	1	` '

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Emiancements F	dilitual Revenue Requirement	Responsible Customer(s)
	Add a motor to an existing		
	switch at Prince George to		
	allow for Sectionalizing		
b2181	scheme for line #2124 and		
	allow for Brickhouse DP		
	to be re-energized from the		
	115 kV source		Dominion (100%)
	Install 230kV 4-breaker		
	ring at Enterprise 230 kV		
b2182	to isolate load from		
	transmission system when		
	substation initially built		Dominion (100%)
	Add a motor to an existing		
b2183	switch at Keene Mill to		
02103	allow for a sectionalizing		
	scheme		Dominion (100%)
	Install a 230 kV breaker at		
	Tarboro to split line #229.		
b2184	Each will feed an		
02104	autotransformer at		
	Tarboro. Install switches		
	on each autotransformer		Dominion (100%)
	Uprate Line #69 segment		
	Reams DP to Purdy (19		
b2185	miles) from 41 MVA to		
02103	162 MVA by replacing 5		
	structures and re-sagging		
	the line from 50C to 75C		Dominion (100%)
	Install a 2nd 230-115kV		
	transformer at Earleys		
	connected to the existing		
b2186	115kV and 230kV ring		
	busses. Add a 115 kV		
	breaker and 230kV		
	breaker to the ring busses		Dominion (100%)
	Install 4 - 230kV breakers		
b2187	at Shellhorn 230 kV to		
	isolate load		Dominion (100%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

#### **SCHEDULE 12 – APPENDIX**

## (22) NAEA Rock Springs, LLC

rtequirea ii	undimberon Elmaneements	Timual Revenue Requirement Responsible Castomer(s)
		AEC (1.71%) / AEP (14.04%)
		/ APS (5.61%) / ATSI (8.10%)
		/ BGE (4.36%) / ComEd
		(13.14%) / Dayton (2.15%) /
	Replace a wave trap	DEOK (3.23%) / DL (1.73%) /
	potential transformer at	DPL (2.65%) / Dominion
b0272.2	Rock Springs 500 kV	(13.03%) / EKPC (1.77%) /
	substation – 5025 Line	JCPL (3.84%) / ME (1.93%) /
	Terminal Upgrade	NEPTUNE* (0.45%) / OVEC
		(0.07%) / PECO (5.29%) /
		PENELEC (1.89%) / PEPCO
		(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)

<sup>\*</sup> Neptune Regional Transmission System, LLC

#### SCHEDULE 12 – APPENDIX A

## (2) Baltimore Gas and Electric Company

required 1	Taristrussion Emilancements	Annual Revenue Requirement	Responsible Customer(s)
	Install a 115 kV tie		
	breaker at Wagner to		
b2219	create a separation from		BGE (100%)
	line 110535 and		
	transformer 110-2		
b2220	Install four 115 kV		BGE (100%)
02220	breakers at Chestnut Hill		
	Install an SPS to trip		
b2221	approximately 19 MW		BGE (100%)
02221	load at Green St. and		DGE (100%)
	Concord		
	Install a 230/115kV		
	transformer at Raphael		
	Rd and construct		
	approximately 3 miles of		
b2307	115kV line from Raphael		BGE (100%)
	Rd. to Joppatowne.		
	Construct a 115kV three		
	breaker ring at		
	Joppatowne		
	Build approximately 3		
	miles of 115kV		
	underground line from		
	Bestgate tap to Waugh		
b2308	Chapel. Create two		BGE (100%)
	breaker bay at Waugh		
	Chapel to accommodate		
	the new underground		
	circuit		
	Build a new Camp Small		
b2396	115 kV station and install		BGE (100%)
	30 MVAR capacitor		

### **Baltimore Gas and Electric Company (cont.)**

_	T 11 1 1	1	1
b2396.1	Install a tie breaker at		PCE (100%)
02390.1	Mays Chapel 115 kV		BGE (100%)
	substation		
	Upgrade the Riverside		
	115kV substation strain		
	bus conductors on		
	circuits 115012 and		
b2567	115011 with double		BGE (100%)
	bundled 1272 ACSR to		
	achieve ratings of		
	491/577 MVA SN/SE on		
	both transformer leads		
	Reconductor Northwest –		
	Northwest #2 115kV		
1-2569	110574 substation tie		DCE (1000/)
b2568	circuit with 2167 ACSR		BGE (100%)
	to achieve ratings of		
	400/462 MVA SN/SE		
	Conastone 230 kV		
	substation tie-in work		AEP (6.46%) / APS (8.74%) /
	(install a new circuit		BGE (19.74%) / ComEd (2.16%)
1.0750.6	breaker at Conastone		/ Dayton (0.59%) / DEOK
b2752.6	230 kV and upgrade any		(1.02%) / DL (0.01%) /
	required terminal		Dominion (39.95%) / EKPC
	equipment to terminate		(0.45%) / PEPCO (20.88%)
	the new circuit)		
	,		AEP (6.46%) / APS (8.74%) /
	Reconductor/Rebuild the		BGE (19.74%) / ComEd (2.16%)
	two Conastone –		/ Dayton (0.59%) / DEOK
b2752.7	Northwest 230 kV lines		(1.02%) / DL (0.01%) /
	and upgrade terminal		Dominion (39.95%) / EKPC
	equipment on both ends		(0.45%) / PEPCO (20.88%)
	Replace the Conastone		,,
b2752.8	230 kV '2322 B5'		PGF (1000)
	breaker with a 63kA		BGE (100%)
	breaker		
		I	

### **Baltimore Gas and Electric Company (cont.)**

	required Transmission Emiliate Transmission Emiliate Transmission Education (5)			
b2752.9	Replace the Conastone 230 kV '2322 B6' breaker with a 63kA breaker	BGE (100%)		
b2766.1	Upgrade substation equipment at Conastone 500 kV to increase facility rating to 2826 MVA normal and 3525 MVA emergency	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%)		
		NEPTUNE* (1.22%) / PENELEC (2.30%) / PEPCO (12.59%) / PSEG (24.22%) / RE (0.96%)		

<sup>\*</sup>Neptune Regional Transmission System, LLC

### **Baltimore Gas and Electric Company (cont.)**

1104011001		minua re chae requierie	it Responsible Customer(s)
b2816	Re-connect the Crane – Windy Edge 110591 & 110592 115 kV circuits into the Northeast Substation with the addition of a new 115 kV 3-breaker bay		BGE (100%)
b2992.1	Reconductor the Conastone to Graceton 230 kV 2323 & 2324 circuits. Replace 7 disconnect switches at Conastone substation		AEP (2.25%) / APS (2.58%) / BGE (44.61%) / ComEd (0.51%) / Dayton (0.40%) / DEOK (1.39%) / DL (0.14%) / Dominion (27.05%) / EKPC (0.52%) / PENELEC (0.02%) / PEPCO (20.53%)
b2992.2	Add Bundle conductor on the Graceton – Bagley – Raphael Road 2305 & 2313 230 kV circuits		AEP (2.25%) / APS (2.58%) / BGE (44.61%) / ComEd (0.51%) / Dayton (0.40%) / DEOK (1.39%) / DL (0.14%) / Dominion (27.05%) / EKPC (0.52%) / PENELEC (0.02%) / PEPCO (20.53%)
b2992.3	Replacing short segment of substation conductor on the Windy Edge to Glenarm 110512 115 kV circuit		AEP (2.25%) / APS (2.58%) / BGE (44.61%) / ComEd (0.51%) / Dayton (0.40%) / DEOK (1.39%) / DL (0.14%) / Dominion (27.05%) / EKPC (0.52%) / PENELEC (0.02%) / PEPCO (20.53%)
b2992.4	Reconductor the Raphael Road – Northeast 2315 & 2337 230 kV circuits		AEP (2.25%) / APS (2.58%) / BGE (44.61%) / ComEd (0.51%) / Dayton (0.40%) / DEOK (1.39%) / DL (0.14%) / Dominion (27.05%) / EKPC (0.52%) / PENELEC (0.02%) / PEPCO (20.53%)

#### SCHEDULE 12 – APPENDIX A

## (3) Delmarva Power & Light Company

Required 118	ansmission Enhancements Ar	inuai Revenue Requirement	Responsible Customer(s)
b2288	Build a new 138 kV line from Piney Grove –		DPL (100%)
	Wattsville		
	Reconductor the Harmony		
b2395	– Chapel St 138 kV		DPL (100%)
	circuit		,
	Replace Terminal		
b2569	equipment at Silverside		DPL (100%)
	69 kV substation		
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd
	Implement high speed relaying utilizing OPGW on Red Lion – Hope Creek 500 kV line		(13.14%) / Dayton (2.15%) /
			DEOK (3.23%) / DL (1.73%) /
			DPL (2.65%) / Dominion
			(13.03%) / EKPC (1.77%) /
b2633.7			JCPL (3.84%) / ME (1.93%) /
			NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			AEC (0.01%) / DPL (99.98%) /
			JCPL (0.01%)
	Interconnect the new		AEC (8.01%) / BGE (1.94%) /
	Silver Run 230 kV		DPL (12.99%) / JCPL (13.85%)
b2633.10	substation with existing		/ ME (5.88%) / NEPTUNE*
02033.10	Red Lion – Cartanza and		(3.45%) / PECO (17.62%) /
	Red Lion – Cedar Creek		PPL (14.85%) / PSEG (20.79%)
	230 kV lines		/ RE (0.62%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

## Delmarva Power & Light Company (cont.)

Required 11	ansmission Enhancements Am	nuai Revenue Requirement	Responsible Customer(s)
1-2605	Rebuild Worcester – Ocean Pine 69 kV ckt. 1 to		DDI (100%)
b2695	1400A capability summer		DPL (100%)
	emergency		
	Convert existing Preston		
1.20.45	69 kV substation to DPL's		DDI (1000())
b2946	current design standard of		DPL (100%)
	a 3-breaker ring bus		
	Upgrade terminal		
1 20 47 1	equipment at DPL's		DDI (1000/)
b2947.1	Naamans substation		DPL (100%)
	(Darley - Naamans 69 kV)		
	Reconductor 0.11 mile		
b2947.2	section of Darley -		DPL (100%)
	Naamans 69 kV circuit		
	Upgrade terminal		
	equipment at DPL's		
b2948	Silverside Road substation		DPL (100%)
	(Dupont Edge Moor –		
	Silver R. 69 kV)		
	Install a 30 MVAR		
	capacitor bank at DPL's		
	Cool Springs 69 kV		
b2987	substation. The capacitor		DPL (100%)
02767	bank would be installed in		DI L (100%)
	two separate 15 MVAR		
	stages allowing DPL		
	operational flexibility		
	Reconductor the Silverside		
b3143.1	Road – Darley 69 kV		DPL (100%)
	circuit		
L2142 2	Reconductor the Darley –		DDI (1000/)
b3143.2	Naamans 69 kV circuit		DPL (100%)
	Replace three (3) existing		
	1200 A disconnect		
	switches with 2000 A		
b3143.3	disconnect switches and		DPL (100%)
	install three (3) new 2000		(====,=)
	A disconnect switches at		
	Silverside 69 kV station		
		<u>l</u>	<u>L</u>

## Delmarva Power & Light Company (cont.)

required 11	ansinission Enhancements Am	iuai Kevenue Kequiiemeni	Responsible Customer(s)
	Replace two (2) 1200 A		
	disconnect switches with		
	2000 A disconnect		
	switches. Replace existing		
	954 ACSR and 500 SDCU		
	stranded bus with two (2)		
b3143.4	954 ACSR stranded bus.		DDI (1000/)
03143.4	Reconfigure four (4) CTs		DPL (100%)
	from 1200 A to 2000 A		
	and install two (2) new		
	2000 A disconnect		
	switches and two (2) new		
	954 ACSR stranded bus at		
	Naamans 69 kV station		
	Replace four (4) 1200 A		
	disconnect switches with		
	2000 A disconnect		
	switches. Replace existing		
	954 ACSR and 1272		
	MCM AL stranded bus		
	with two (2) 954 ACSR		
	stranded bus. Reconfigure		
b3143.5	eight (8) CTs from 1200 A		DPL (100%)
	to 2000 A and install four		
	(4) new 2000 A (310 MVA		
	SE / 351 MVA WE)		
	disconnect switches and		
	two (2) new 954 ACSR		
	(331 MVA SE / 369 MVA		
	WE) stranded bus at		
	Darley 69 kV station		
	Rebuild approx. 12 miles		
b3155	of Wye Mills –		DPL (100%)
	Stevensville line		

#### SCHEDULE 12 – APPENDIX A

### (4) Jersey Central Power & Light Company

Required Tra	insmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2234	260 MVAR reactor at West Wharton 230 kV		JCPL (100%)
b2270	Advance Raritan River - Replace G1047E breaker at the 230kV Substation		JCPL (100%)
b2271	Advance Raritan River - Replace G1047F breaker at the 230kV Substation		JCPL (100%)
b2272	Advance Raritan River - Replace T1034E breaker at the 230kV Substation		JCPL (100%)
b2273	Advance Raritan River - Replace T1034F breaker at the 230kV Substation		JCPL (100%)
b2274	Advance Raritan River - Replace I1023E breaker at the 230kV Substation		JCPL (100%)
b2275	Advance Raritan River - Replace I1023F breaker at the 230kV Substation		JCPL (100%)
b2289	Freneau Substation - upgrade 2.5 inch pipe to bundled 1590 ACSR conductor at the K1025 230 kV Line Terminal		JCPL (100%)
b2292	Replace the Whippany 230 kV breaker B1 (CAP) with 63kA breaker		JCPL (100%)
b2357	Replace the East Windsor 230 kV breaker 'E1' with 63kA breaker		JCPL (100%)

Required Tra	insmission Enhancements Ar	inual Revenue Requirement	Responsible Customer(s)
	Replace transformer		
b2495	leads on the Glen		JCPL (100%)
02493	Gardner 230/34.5 kV #1		JCFL (100%)
	transformer		
	Replace Franklin		
b2496	115/34.5 kV transformer		JCPL (100%)
02490	#2 with 90 MVA		JCI L (100%)
	transformer		
	Reconductor 0.9 miles of		
	the Captive Plastics to		
b2497	Morris Park 34.5 kV		JCPL (100%)
	circuit (397ACSR) with		
	556 ACSR		
	Extend 5.8 miles of 34.5		
	kV circuit from North		
	Branch substation to		
b2498	Lebanon substation with		JCPL (100%)
	397 ACSR and install		
	34.5 kV breaker at		
	Lebanon substation		
	Upgrade terminal		
	equipment at Monroe on		
b2500	the Englishtown to		JCPL (100%)
	Monroe (H34) 34.5 kV		
	circuit		
	Upgrade limiting		
b2570	terminal facilities at		JCPL (100%)
02370	Feneau, Parlin, and		JCPL (100%)
	Williams substations		
	Upgrade the limiting		
b2571	terminal facilities at both		ICDL (100%)
	Jackson and North		JCPL (100%)
	Hanover		
	Upgrade the V74 34.5 kV		
h2506	transmission line		ICDI (1000/)
b2586	between Allenhurst and		JCPL (100%)
	Elberon Substations		

Required Transmission Enhancements		Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
	Implement high speed	(2.65%) / Dominion (13.03%) /
	Implement high speed relaying utilizing OPGW	EKPC (1.77%) / JCPL (3.84%) /
b2633.6	on Deans – East Windsor	ME (1.93%) / NEPTUNE*
	500 kV	(0.45%) / OVEC (0.07%) /
	300 K V	PECO (5.29%) / PENELEC
		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		AEC (0.01%) / DPL (99.98%) /
		JCPL (0.01%)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
	Implement high speed relaying utilizing OPGW	(2.65%) / Dominion (13.03%) /
		EKPC (1.77%) / JCPL (3.84%) /
b2633.6.1	on East Windsor - New	ME (1.93%) / NEPTUNE*
	Freedom 500 kV	(0.45%) / OVEC (0.07%) /
	r recuoiii 300 k v	PECO (5.29%) / PENELEC
		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		AEC (0.01%) / DPL (99.98%) /
		JCPL (0.01%)

Required 116	insmission Ennancements An	nuai Revenue Requirement	Responsible Customer(s)
b2676	Install one (1) 72 MVAR fast switched capacitor at the Englishtown 230 kV substation		JCPL (100%)
b2708	Replace the Oceanview 230/34.5 kV transformer #1		JCPL (100%)
b2709	Replace the Deep Run 230/34.5 kV transformer #1		JCPL (100%)
b2754.2	Install 5 miles of optical ground wire (OPGW) between Gilbert and Springfield 230 kV substations		JCPL (100%)
b2754.3	Install 7 miles of all- dielectric self-supporting (ADSS) fiber optic cable between Morris Park and Northwood 230 kV substations		JCPL (100%)
b2754.6	Upgrade relaying at Morris Park 230 kV		JCPL (100%)
b2754.7	Upgrade relaying at Gilbert 230 kV		JCPL (100%)
b2809	Install a bypass switch at Mount Pleasant 34.5 kV substation to allow the Mount Pleasant substation load to be removed from the N14 line and transfer to O769 line		JCPL (100%)
b3023	Replace West Wharton 115 kV breakers 'G943A' and 'G943B' with 40kA breakers		JCPL (100%)
b3042	Replace substation conductor at Raritan River 230 kV substation on the Kilmer line terminal		JCPL (100%)

rtequired 11d	nsmission Ennancements Annu	iai Revenue Requirement	Responsible Customer(s)
	Construct seven new 34.5		
	kV circuits on existing pole		
	lines (total of 53.5 miles),		
b3130	rebuild/reconductor two		JCPL (100%)
03130	34.5 kV circuits (total of		3C1 L (100%)
	5.5 miles) and install a		
	second 115/34.5 kV		
	transformer (Werner)		
	Construct a new 34.5 kV		
h2120 1	circuit from Oceanview to		ICDI (1000/)
b3130.1	Allenhurst 34.5 kV (4		JCPL (100%)
	miles)		
	Construct a new 34.5 kV		
b3130.2	circuit from Atlantic to		JCPL (100%)
03130.2	Red Bank 34.5 kV (12		JCI L (100%)
	miles)		
	Construct a new 34.5 kV		
b3130.3	circuit from Freneau to		JCPL (100%)
03130.3	Taylor Lane 34.5 kV (6.5		JCI L (100%)
	miles)		
	Construct a new 34.5 kV		
b3130.4	circuit from Keyport to		JCPL (100%)
	Belford 34.5 kV (6 miles)		
	Construct a new 34.5 kV		
b3130.5	circuit from Red Bank to		JCPL (100%)
	Belford 34.5 kV (5 miles)		
	Construct a new 34.5 kV		
b3130.6	circuit from Werner to		JCPL (100%)
	Clark Street (7 miles)		
	Construct a new 34.5 kV		
b3130.7	circuit from Atlantic to		JCPL (100%)
	Freneau (13 miles)		
	Rebuild/reconductor the		
b3130.8	Atlantic – Camp Woods		JCPL (100%)
03130.6	Switch Point (3.5 miles)		JCI L (10070)
	34.5 kV circuit		
	Rebuild/reconductor the		
b3130.9	Allenhurst – Elberon (2		JCPL (100%)
	miles) 34.5 kV circuit		
	Install 2nd 115/34.5 kV		
b3130.10	transformer at Werner		JCPL (100%)
	substation		

#### SCHEDULE 12 – APPENDIX A

# (5) Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion Loop the 2026 (TMI – Hosensack 500 kV) line (13.03%) / EKPC (1.77%) / b2006.1.1 in to the Lauschtown JCPL (3.84%) / ME (1.93%) / NEPTUNE\* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** PPL (100%) Upgrade relay at South Reading on the 1072 230 b2006.2.1 ME (100%) V line Replace the South Reading 69 kV '81342' b2006.4 ME (100%) breaker with 40kA breaker Replace the South Reading 69 kV '82842' b2006.5 ME (100%) breaker with 40kA breaker APS (8.30%) / BGE (14.70%) / DEOK (0.48%) / Dominion Install 2nd Hunterstown b2452 (36.92%) / ME (23.85%) / 230/115 kV transformer

PEPCO (15.75%)

# Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone (cont.)

required 11a	uisitussion Elliancements	Annual Revenue Requiremen	1
b2452.1	Reconductor Hunterstown - Oxford 115 kV line		APS (8.30%) / BGE (14.70%) / DEOK (0.48%) / Dominion (36.92%) / ME (23.85%) / PEPCO (15.75%)
b2452.3	Replace the Hunterstown 115 kV breaker '96192' with 40 kA		ME (100%)
b2588	Install a 36.6 MVAR 115 kV capacitor at North Bangor substation		ME (100%)
b2637	Convert Middletown Junction 230 kV substation to nine bay double breaker configuration.		ME (100%)
b2644	Install a 28.8 MVAR 115 kV capacitor at the Mountain substation		ME (100%)
b2688.1	Lincoln Substation: Upgrade the bus conductor and replace CTs.		AEP (12.91%) / APS (19.04%) / ATSI (1.24%) / ComEd (0.35%) / Dayton (1.45%) / DEOK (2.30%) / DL (1.11%) / Dominion (44.85%) / EKPC (0.78%) / PEPCO (15.85%) / RECO (0.12%)
b2688.2	Germantown Substation: Replace 138/115 kV transformer with a 135/180/224 MVA bank. Replace Lincoln 115 kV breaker, install new 138 kV breaker, upgrade bus conductor and adjust/replace CTs.		AEP (12.91%) / APS (19.04%)/ ATSI (1.24%) / ComEd (0.35%) / Dayton (1.45%) / DEOK (2.30%) / DL (1.11%)/ Dominion (44.85%) / EKPC (0.78%)/ PEPCO (15.85%) / RECO (0.12%)

# Mid-Atlantic Interstate Transmission, LLC for the Metropolitan Edison Company Zone (cont.)

Required Tra	insmission Enhancements	Annual Revenue Requirement	nt Responsible Customer(s)
	Upgrade terminal		AEP (6.46%) / APS (8.74%) /
b2743.4	equipment at		BGE (19.74%) / ComEd
	Hunterstown 500 kV on		(2.16%) / Dayton (0.59%) /
	the Conemaugh –		DEOK (1.02%) / DL (0.01%) /
	Hunterstown 500 kV		Dominion (39.95%) / EKPC
	circuit		(0.45%) / PEPCO (20.88%)
	Upgrade terminal		AEP (6.46%) / APS (8.74%) /
	equipment and required		BGE (19.74%) / ComEd
b2752.4	relay communication at		(2.16%) / Dayton (0.59%) /
02732.4	TMI 500 kV: on the		DEOK (1.02%) / DL (0.01%) /
	Beach Bottom – TMI		Dominion (39.95%) / EKPC
	500 kV circuit		(0.45%) / PEPCO (20.88%)
	Replace relay at West		
	Boyertown 69 kV station		
b2749	on the West Boyertown –		ME (100%)
	North Boyertown 69 kV		
	circuit		
	Upgrade bus conductor at		
	Gardners 115 kv		
b2765	substation; Upgrade bus		ME (100%)
02703	conductor and adjust CT		1412 (10070)
	ratios at Carlisle Pike 115		
	kV		
	Upgrade limiting 115 kV		
	switches on the 115 kV		
b2950	side of the 230/115 kV		ME (100%)
02300	Northwood substation		(10070)
	and adjust setting on		
	limiting ZR relay		
1.2126	Replace bus conductor at		NE (100%)
b3136	Smith 115 kV substation		ME (100%)
	Rebuild the Hunterstown		AEP (16.60%) / APS (8.09%) /
	- Lincoln 115 kV Line		BGE (2.74%) / Dayton
10115	No. 962 (approx. 2.6		(2.00%) / DEOK (0.35%) / DL
b3145	miles). Upgrade limiting		(1.31%) / Dominion (52.77%)
	terminal equipment at		/ EKPC (1.54%) / OVEC
	Hunterstown and Lincoln		(0.06%) / PEPCO (14.54%)
L		l .	

#### SCHEDULE 12 – APPENDIX A

# (7) Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone

Required T	ransmission Enhancements	Annual Revenue Requiremen	nt Responsible Customer(s)
b2212	Shawville Substation: Relocate 230 kV and 115 kV controls from the generating station building to new control building		PENELEC (100%)
b2293	Replace the Erie South 115 kV breaker 'Buffalo Rd' with 40kA breaker		PENELEC (100%)
b2294	Replace the Johnstown 115 kV breaker 'Bon Aire' with 40kA breaker		PENELEC (100%)
b2302	Replace the Erie South 115 kV breaker 'French #2' with 40kA breaker		PENELEC (100%)
b2304	Replace the substation conductor and switch at South Troy 115 kV substation		PENELEC (100%)
b2371	Install 75 MVAR capacitor at the Erie East 230 kV substation		PENELEC (100%)
b2441	Install +250/-100 MVAR SVC at the Erie South 230 kV station		PENELEC (100%)
b2442	Install three 230 kV breakers on the 230 kV side of the Lewistown #1, #2 and #3 transformers		PENELEC (100%)
b2450	Construct a new 115 kV line from Central City West to Bedford North		PENELEC (100%)
b2463	Rebuild and reconductor 115 kV line from East Towanda to S. Troy and upgrade terminal equipment at East Towanda, Tennessee Gas and South Troy		PENELEC (100%)

Required T	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Construct Warren 230 kV		
b2494	ring bus and install a second Warren 230/115		PENELEC (100%)
	kV transformer		
	Reconductor the North		
	Meshoppen – Oxbow-		
	Lackawanna 230 kV		PENELEC (99.00%) / PPL
b2552.1	circuit and upgrade		(1.00%)
	terminal equipment		(====,=)
	(MAIT portion)		
	Replace the Warren 115		
b2573	kV 'B12' breaker with a		PENELEC (100%)
	40kA breaker		` ,
	Reconfigure Pierce Brook		
	345 kV station to a ring		
b2587	bus and install a 125		PENELEC (100%)
	MVAR shunt reactor at		
	the station		
	Replace relays at East		
b2621	Towanda and East Sayre		PENELEC (100%)
02021	115 kV substations		TENEELE (10070)
	(158/191 MVA SN/SE)		
	Replace wave trap, bus		
10077	conductor and relay at		DENIEL EC (1000/)
b2677	Hilltop 115 kV substation.		PENELEC (100%)
	Replace relays at Prospect and Cooper substations		
	Convert the East Towarda		
	115 kV substation to		
b2678	breaker and half		PENELEC (100%)
	configuration		
	Install a 115 kV Venango		
b2679	Jct. line breaker at		PENELEC (100%)
	Edinboro South		
b2680	Install a 115 kV breaker		
	on Hooversville #1 115/23		PENELEC (100%)
	kV transformer		` ,
	Install a 115 kV breaker		
b2681	on the Eclipse #2 115/34.5		PENELEC (100%)
	kV transformer		

required 1	Talishiission Emiancements An	muai Kevenue Kequirement	Responsible Customer(s)
b2682	Install two 21.6 MVAR capacitors at the Shade Gap 115 kV substation		PENELEC (100%)
b2683	Install a 36 MVAR 115 kV capacitor and associated equipment at Morgan Street substation		PENELEC (100%)
b2684	Install a 36 MVAR 115 kV capacitor at Central City West substation		PENELEC (100%)
b2685	Install a second 115 kV 3000A bus tie breaker at Hooversville substation		PENELEC (100%)
b2735	Replace the Warren 115 kV 'NO. 2 XFMR' breaker with 40kA breaker		PENELEC (100%)
b2736	Replace the Warren 115 kV 'Warren #1' breaker with 40kA breaker		PENELEC (100%)
b2737	Replace the Warren 115 kV 'A TX #1' breaker with 40kA breaker		PENELEC (100%)
b2738	Replace the Warren 115 kV 'A TX #2' breaker with 40kA breaker		PENELEC (100%)
b2739	Replace the Warren 115 kV 'Warren #2' breaker with 40kA breaker		PENELEC (100%)
b2740	Revise the reclosing of the Hooversville 115 kV 'Ralphton' breaker		PENELEC (100%)
b2741	Revise the reclosing of the Hooversville 115 kV 'Statler Hill' breaker		PENELEC (100%)

required 1	Taristinssion Emianeements Ai	ilidai Revenue Requirement	Responsible Customer(s)
	Tie in new Rice substation		AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) /
b2743.2	to Conemaugh –		DEOK (1.02%) / DL (0.01%)
	Hunterstown 500 kV		/ Dominion (39.95%) / EKPC
			(0.45%) / PEPCO (20.88%)
			AEP (6.46%) / APS (8.74%) /
	Upgrade terminal		BGE (19.74%) / ComEd
	equipment at Conemaugh		(2.16%) / Dayton (0.59%) /
b2743.3	500 kV on the Conemaugh		DEOK (1.02%) / DL (0.01%)
	– Hunterstown 500 kV		/ Dominion (39.95%) / EKPC
	circuit		(0.45%) / PEPCO (20.88%)
	Install two 28 MVAR		
b2748	capacitors at Tiffany 115		PENELEC (100%)
	kV substation		
	Construct a new 345 kV		
	breaker string with three		
	(3) 345 kV breakers at		
b2767	Homer City and move the		PENELEC (100%)
	North autotransformer		
	connection to this new		
	breaker string		
	Reconductor 3.7 miles of		
1.2002	the Bethlehem – Leretto 46		DENEL EG (1000()
b2803	kV circuit and replace		PENELEC (100%)
	terminal equipment at		
	Summit 46 kV		
	Install a new relay and replace 4/0 CU bus		
	conductor at Huntingdon		
b2804	46 kV station, on the		PENELEC (100%)
	Huntingdon – C tap 46 kV		
	circuit		
	Install a new relay and		
	replace 4/0 CU & 250 CU		
b2805	substation conductor at		
	Hollidaysburg 46 kV		PENELEC (100%)
	station, on the		
	Hollidaysburg – HCR Tap		
	46 kV circuit		
L		1	

Required 1	ransmission Enhancements Ai	nual Revenue Requirement	Responsible Customer(s)
	Install a new relay and		
b2806	replace meter at the		
	Raystown 46 kV		PENELEC (100%)
02000	substation, on the		I LINELLE (10070)
	Raystown – Smithfield 46		
	kV circuit		
	Replace the CHPV and		
	CRS relay, and adjust the		
	IAC overcurrent relay trip		
b2807	setting; or replace the relay		PENELEC (100%)
	at Eldorado 46 kV		
	substation, on the Eldorado		
	<ul> <li>Gallitzin 46 kV circuit</li> </ul>		
	Adjust the JBC overcurrent		
	relay trip setting at		
	Raystown 46 kV, and		
	replace relay and 4/0 CU		
b2808	bus conductor at		PENELEC (100%)
	Huntingdon 46 kV		
	substations, on the		
	Raystown – Huntingdon 46		
	kV circuit		
	Replace Seward 115 kV		
b2865	breaker "Jackson Road"		PENELEC (100%)
	with 63kA breaker		
	Replace Seward 115 kV		
b2866	breaker "Conemaugh N."		PENELEC (100%)
	with 63kA breaker		
	Replace Seward 115 kV		
b2867	breaker "Conemaugh S."		PENELEC (100%)
	with 63kA breaker		, , ,
	Replace Seward 115 kV		
b2868	breaker "No.8 Xfmr" with		PENELEC (100%)
2200	63kA breaker		
	Install two 345 kV 80		
b2944	MVAR shunt reactors at		PENELEC (100%)
	Mainesburg station		121(2220 (10070)
	1.14111050415 54441011		

Required 1	ransmission Enhancements An	nual Revenue Requirement	Responsible Customer(s)
b2951	Seward, Blairsville East, Shelocta work		PENELEC (100%)
b2951.1	Upgrade Florence 115 kV line terminal equipment at Seward SS		PENELEC (100%)
b2951.2	Replace Blairsville East / Seward 115 kV line tuner, coax, line relaying and carrier set at Shelocta SS		PENELEC (100%)
b2951.3	Replace Seward / Shelocta 115 kV line CVT, tuner, coax, and line relaying at Blairsville East SS		PENELEC (100%)
b2952	Replace the North Meshoppen #3 230/115 kV transformer eliminating the old reactor and installing two breakers to complete a 230 kV ring bus at North Meshoppen		PENELEC (100%)
b2953	Replace the Keystone 500 kV breaker "NO. 14 Cabot" with 50kA breaker		PENELEC (100%)
b2954	Replace the Keystone 500 kV breaker "NO. 16 Cabot" with 50kA breaker		PENELEC (100%)
b2984	Reconfigure the bus at Glory and install a 50.4 MVAR 115 kV capacitor		PENELEC (100%)
b3007.2	Reconductor the Blairsville East to Social Hall 138 kV line and upgrade terminal equipment - PENELEC portion. 4.8 miles total. The new conductor will be 636 ACSS replacing the existing 636 ACSR conductor. At Blairsville East, the wave trap and breaker disconnects will be replaced		PENELEC (100%)

required 1	Tansinission Emiancements Annu	iai Kevenue Kequirement	Responsible Customer(s)
	Upgrade Blairsville East 138/115 kV transformer		
	terminals. This project is an		
	upgrade to the tap of the		
b3008	Seward – Shelocta 115 kV		PENELEC (100%)
	line into Blairsville		, ,
	substation. The project will		
	replace the circuit breaker		
	and adjust relay settings		
	Upgrade Blairsville East 115		
h2000	kV terminal equipment.		DENEL EC (1000/)
b3009	Replace 115 kV circuit		PENELEC (100%)
	breaker and disconnects		
	Replace the existing Shelocta		
b3014	230/115 kV transformer and		PENELEC (100%)
	construct a 230 kV ring bus		
	Upgrade terminal equipment		
	at Corry East 115 kV to		
b3016	increase rating of Four Mile		PENELEC (100%)
	to Corry East 115 kV line.		
	Replace bus conductor		
	Rebuild Glade to Warren 230		
	kV line with hi-temp		
	conductor and substation		
b3017.1	terminal upgrades. 11.53		PENELEC (100%)
	miles. New conductor will be		
	1033 ACSS. Existing		
	conductor is 1033 ACSR		
	Glade substation terminal		
b3017.2	upgrades. Replace bus		PENELEC (100%)
03017.2	conductor, wave traps, and		FENELLC (100%)
	relaying		
b3017.3	Warren substation terminal		
	upgrades. Replace bus		PENELEC (100%)
	conductor, wave traps, and		1 ENELLC (100%)
	relaying		
	Replace Saxton 115 kV		
b3022	breaker 'BUS TIE' with a		PENELEC (100%)
	40kA breaker		

Kcquiicu i	ransmission Emancements Annu	iai Revenue Requirement	Responsible Customer(s)
b3024	Upgrade terminal equipment at Corry East 115 kV to increase rating of Warren to Corry East 115 kV line.		PENELEC (100%)
b3043	Replace bus conductor Install one 115 kV 36 MVAR capacitor at West		PENELEC (100%)
b3073	Fall 115 kV substation Replace the Blairsville East 138/115 kV transformer and associated equipment such as breaker disconnects and bus		PENELEC (100%)
b3077	conductor  Reconductor the Franklin  Pike B – Wayne 115 kV line  (6.78 miles)		PENELEC (100%)
b3078	Reconductor the 138 kV bus and replace the line trap, relays Morgan Street. Reconductor the 138 kV bus at Venango Junction		PENELEC (100%)
b3082	Construct 4-breaker 115 kV ring bus at Geneva		PENELEC (100%)
b3137	Rebuild 20 miles of the East Towanda – North Meshoppen 115 kV line		PENELEC (100%)
b3144	Upgrade bus conductor and relay panels of the Jackson Road – Nanty Glo 46 kV SJN line		PENELEC (100%)
b3144.1	Upgrade line relaying and substation conductor on the 46 kV Nanty Glo line exit at Jackson Road substation		PENELEC (100%)
b3144.2	Upgrade line relaying and substation conductor on the 46 kV Jackson Road line exit at Nanty Glo substation		PENELEC (100%)
b3154	Install one (1) 13.2 MVAR 46 kV capacitor at the Logan substation		PENELEC (100%)

#### SCHEDULE 12 – APPENDIX A

## (8) PECO Energy Company

Required To	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
_	Replace Waneeta 138 kV		
b2130	breaker '15' with 63 kA		PECO (100%)
	rated breaker		
	Replace Waneeta 138 kV		
b2131	breaker '35' with 63 kA		PECO (100%)
	rated breaker		
	Replace Waneeta 138 kV		
b2132	breaker '875' with 63 kA		PECO (100%)
	rated breaker		
	Replace Waneeta 138 kV		
b2133	breaker '895' with 63 kA		PECO (100%)
	rated breaker		
	Plymouth Meeting 230		
b2134	kV breaker '115' with 63		PECO (100%)
	kA rated breaker		
	Install a second		
b2222	Eddystone 230/138 kV		PECO (100%)
	transformer		
	Replace the Eddystone		
b2222.1	138 kV #205 breaker with		PECO (100%)
	63kA breaker		
	Increase Rating of		
b2222.2	Eddystone #415 138kV		PECO (100%)
	Breaker		
b2236	50 MVAR reactor at		PECO (100%)
02230	Buckingham 230 kV		1200 (10070)
	Replace Whitpain 230 kV		
b2527	breaker '155' with 80kA		PECO (100%)
	breaker		
	Replace Whitpain 230 kV		
b2528	breaker '525' with 80kA		PECO (100%)
	breaker		
1.5555	Replace Whitpain 230 kV		PHGC (400:1)
b2529	breaker '175' with 80 kA		PECO (100%)
	breaker		
	Replace terminal		
10710	equipment inside		PEGO (1000)
b2549	Chichester substation on		PECO (100%)
	the 220-36 (Chichester –		
	Eddystone) 230 kV line		

## **PECO Energy Company (cont.)**

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2550	Replace terminal equipment inside Nottingham substation on the 220-05 (Nottingham – Daleville- Bradford) 230 kV line		PECO (100%)
b2551	Replace terminal equipment inside Llanerch substation on the 130-45 (Eddystone to Llanerch) 138 kV line		PECO (100%)
b2572	Replace the Peach Bottom 500 kV '#225' breaker with a 63kA breaker		PECO (100%)
b2694	Increase ratings of Peach Bottom 500/230 kV transformer to 1479 MVA normal/1839 MVA emergency		AEC (3.97%)/ AEP (5.77%)/ APS (4.27%)/ ATSI (6.15%)/ BGE (1.63%)/ ComEd (0.72%)/ Dayton (1.06%)/ DEOK (1.97%)/ DL (2.25%)/ Dominion (0.35%)/ DPL (14.29%)/ ECP (0.69%)/ EKPC (0.39%)/ HTP (0.96%)/ JCPL (6.84%) MetEd (3.28%)/ Neptune (2.14%)/ PECO (16.42%)/ PENELEC (3.94%)/ PPL (8.32%)/ PSEG (14.13%)/ RECO (0.44%)
b2752.2	Tie in new Furnace Run substation to Peach Bottom – TMI 500 kV		AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK (1.02%) / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)
b2752.3	Upgrade terminal equipment and required relay communication at Peach Bottom 500 kV: on the Beach Bottom – TMI 500 kV circuit		AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK (1.02%) / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)

## PECO Energy Company (cont.)

Required Ti	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
			<b>Load-Ratio Share</b>
			Allocation:
			AEC (1.71%) / AEP
			(14.04%) / APS (5.61%) /
			ATSI (8.10%) / BGE
			(4.36%) / ComEd (13.14%) /
			Dayton (2.15%) / DEOK
			(3.23%) / DL (1.73%) / DPL
			(2.65%) / Dominion
			(13.03%) / EKPC (1.77%) /
	Upgrade substation		JCPL (3.84%) / ME (1.93%)
	equipment at Peach		/ NEPTUNE* (0.45%) /
b2766.2	Bottom 500 kV to		OVEC (0.07%) / PECO
02700.2	increase facility rating to		(5.29%) / PENELEC
	2826 MVA normal and		(1.89%) / PEPCO (3.82%) /
	3525 MVA emergency		PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			<b>DFAX Allocation:</b>
			AEC (3.52%) / APS (9.95%)
			/ ATSI (10.68%) / BGE
			(6.92%) / DPL (16.32%) /
			JCPL (11.32%) /
			NEPTUNE* (1.22%) /
			PENELEC (2.30%) /
			PEPCO (12.59%) / PSEG
			(24.22%) / RE (0.96%)
Neptune R	Regional Transmission System	m, LLC	

## PECO Energy Company (cont.)

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2774	Reconductor the Emilie - Falls 138 kV line, and replace station cable and relay		PECO (100%)
b2775	Reconductor the Falls - U.S. Steel 138 kV line		PECO (100%)
b2850	Replace the Waneeta 230 kV "285" with 63kA breaker		PECO (100%)
b2852	Replace the Chichester 230 kV "195" with 63kA breaker		PECO (100%)
b2854	Replace the North Philadelphia 230 kV "CS 775" with 63kA breaker		PECO (100%)
b2855	Replace the North Philadelphia 230 kV "CS 885" with 63kA breaker		PECO (100%)
b2856	Replace the Parrish 230 kV "CS 715" with 63kA breaker		PECO (100%)
b2857	Replace the Parrish 230 kV "CS 825" with 63kA breaker		PECO (100%)
b2858	Replace the Parrish 230 kV "CS 935" with 63kA breaker		PECO (100%)
b2859	Replace the Plymouth Meeting 230 kV "215" with 63kA breaker		PECO (100%)
b2860	Replace the Plymouth Meeting 230 kV "235" with 63kA breaker		PECO (100%)
b2861	Replace the Plymouth Meeting 230 kV "325" with 63kA breaker		PECO (100%)
b2862	Replace the Grays Ferry 230 kV "705" with 63kA breaker		PECO (100%)

## PECO Energy Company (cont.)

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2863	Replace the Grays Ferry 230 kV "985" with 63kA breaker		PECO (100%)
b2864	Replace the Grays Ferry 230 kV "775" with 63kA breaker		PECO (100%)
b2923	Replace the China Tap 230 kV 'CS 15' breaker with a 63 kA breaker		PECO (100%)
b2924	Replace the Emilie 230 kV 'CS 15' breaker with 63 kA breaker		PECO (100%)
b2925	Replace the Emilie 230 kV 'CS 25' breaker with 63 kA breaker		PECO (100%)
b2926	Replace the Chichester 230 kV '215' breaker with 63 kA breaker		PECO (100%)
b2927	Replace the Plymouth Meeting 230 kV '125' breaker with 63 kA breaker		PECO (100%)
b2985	Replace the 230 kV CB #225 at Linwood Substation (PECO) with a double circuit breaker (back to back circuit breakers in one device)		PECO (100%)
b3041	Peach Bottom – Furnace Run 500 kV terminal equipment		PECO (100%)
b3120	Replace the Whitpain 230 kV breaker "125" with a 63 kA breaker		PECO (100%)
b3138	Move 2 MVA load from the Roxborough to Bala substation. Adjust the tap setting on the Master 138/69 kV transformer #2		PECO (100%)
b3146	Upgrade the Richmond 69 kV breaker "140" with 40 kA breaker		PECO (100%)

#### SCHEDULE 12 – APPENDIX A

#### (9) PPL Electric Utilities Corporation

Annual Revenue Requirement Required Transmission Enhancements Responsible Customer(s) Replace the Blooming b1813.12 Grove 230 kV breaker PPL (100%) 'Peckville' Rebuild and reconductor 2.6 miles of b2223 PPL (100%) the Sunbury - Dauphin 69 kV circuit Add a 2nd 150 MVA 230/69 kV transformer b2224 PPL (100%) at Springfield **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / 150 MVAR shunt EKPC (1.77%) / JCPL (3.84%) / b2237 reactor at Alburtis 500 ME (1.93%) / NEPTUNE\* kV (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PPL (100%) 100 MVAR shunt b2238 reactor at Elimsport 230 PPL (100%) kV

<sup>\*</sup> Neptune Regional Transmission System, LLC

required	Transmission Emiancements	Thinaul Ite Chae Itequire	nent Responsible Customer(s)
b2269	Rebuild approximately 23.7 miles of the Susquehanna - Jenkins 230kV circuit. This replaces a temporary SPS that is already planned to mitigate the violation until this solution is implemented		PPL (100%)
b2282	Rebuild the Siegfried- Frackville 230 kV line		PPL (100%)
b2406.1	Rebuild Stanton- Providence 69 kV 2&3 9.5 miles with 795 SCSR		PPL (100%)
b2406.2	Reconductor 7 miles of the Lackawanna - Providence 69 kV #1 and #2 with 795 ACSR		PPL (100%)
b2406.3	Rebuild SUB2 Tap 1 (Lackawanna - Scranton 1) 69 kV 1.5 miles 556 ACSR		PPL (100%)
b2406.4	Rebuild SUB2 Tap 2 (Lackawanna - Scranton 1) 69 kV 1.6 miles 556 ACSR		PPL (100%)
b2406.5	Create Providence - Scranton 69 kV #1 and #2, 3.5 miles with 795 ACSR		PPL (100%)
b2406.6	Rebuild Providence 69 kV switchyard		PPL (100%)
b2406.7	Install 2 - 10.8 MVAR capacitors at EYNO 69 kV		PPL (100%)
b2406.8	Rebuild Stanton 230 kV yard		PPL (100%)

	Transmission Elimancements	T TITLE WALL THE FEBRUARY THE GUILT	official responsible customer(s)
b2446	Replace wave trap and protective relays at Montour		PPL (100%)
b2447	Replace wave trap and protective relays at Montour		PPL (100%)
b2448	Install a 2nd Sunbury 900MVA 500-230kV transformer and associated equipment		PPL (100%)
b2552.2	Reconductor the North Meshoppen - Oxbow - Lackawanna 230 kV circuit and upgrade terminal equipment (PPL portion)		PENELEC (98.84%) / PPL (1.16%)
b2574	Replace the Sunbury 230 kV 'MONTOUR NORT' breaker with a 63kA breaker		PPL (100%)
b2690	Reconductor two spans of the Graceton – Safe Harbor 230 kV transmission line. Includes termination point upgrades		PPL (100%)
b2691	Reconductor three spans limiting Brunner Island – Yorkana 230 kV line, add 2 breakers to Brunner Island switchyard, upgrade associated terminal equipment		PPL (100%)

Required	Transmission Ennancements	Annual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
	Add a 200 MVAR shunt	(2.65%) / Dominion (13.03%) /
b2716	reactor at Lackawanna	EKPC (1.77%) / JCPL (3.84%) /
02/10	500 kV substation	ME (1.93%) / NEPTUNE*
	300 K v Substation	(0.45%) / OVEC (0.07%) /
		PECO (5.29%) / PENELEC
		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		PPL (100%)
	Install 7 miles of optical	
	ground wire (OPGW)	
b2754.1	between Gilbert and	PPL (100%)
	Springfield 230 kV	
	substations	
	Use ~ 40 route miles of	
	existing fibers on PPL	PD7 (4004)
b2754.4	230 kV system to	PPL (100%)
	establish direct fiber	
	circuits	
b2754.5	Upgrade relaying at	PPL (100%)
	Martins Creek 230 kV	
b2756	Install 2% reactors at	PPL (100%)
	Martins Creek 230 kV	122(20070)
b2813	Expand existing	
	Lycoming 69 kV yard to	PPL (100%)
	double bus double	112(10070)
	breaker arrangement	

<sup>\*</sup> Neptune Regional Transmission System, LLC

Required	Transmission Elmancements	Almuai Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
	Decenfiques/Evened the	(3.23%) / DL (1.73%) / DPL
	Reconfigure/Expand the Lackawanna 500 kV	(2.65%) / Dominion (13.03%) /
b2824	substation by adding a	EKPC (1.77%) / JCPL (3.84%) /
02024	,	ME (1.93%) / NEPTUNE*
	third bay with three breakers	(0.45%) / OVEC (0.07%) /
	breakers	PECO (5.29%) / PENELEC
		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		PPL (100%)
	Build a new 230/69 kV	
	substation by tapping the	
	Montour – Susquehanna	
b2838	230 kV double circuits	PPL (100%)
	and Berwick – Hunlock	
	& Berwick – Colombia	
	69 kV circuits	
b2979	Replace Martins Creek	
	230 kV circuit breakers	PPL (100%)
	with 80 kA rating	

<sup>\*</sup> Neptune Regional Transmission System, LLC

#### **SCHEDULE 12 – APPENDIX A**

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

Required Tra	ansmission Enhancements	Annual Revenue Requiremen	nt Responsible Customer(s)
b2218	Rebuild 4 miles of overhead line from Edison - Meadow Rd - Metuchen (Q 1317)		PSEG (100%)
b2239	50 MVAR reactor at Saddlebrook 230 kV		PSEG (100%)
b2240	50 MVAR reactor at Athenia 230 kV		PSEG (100%)
b2241	50 MVAR reactor at Bergen 230 kV		PSEG (100%)
b2242	50 MVAR reactor at Hudson 230 kV		PSEG (100%)
b2243	Two 50 MVAR reactors at Stanley Terrace 230 kV		PSEG (100%)
b2244	50 MVAR reactor at West Orange 230 kV		PSEG (100%)
b2245	50 MVAR reactor at Aldene 230 kV		PSEG (100%)
b2246	150 MVAR reactor at Camden 230 kV		PSEG (100%)
b2247	150 MVAR reactor at Gloucester 230 kV		PSEG (100%)
b2248	50 MVAR reactor at Clarksville 230 kV		PSEG (100%)
b2249	50 MVAR reactor at Hinchmans 230 kV		PSEG (100%)
b2250	50 MVAR reactor at Beaverbrook 230 kV		PSEG (100%)
b2251	50 MVAR reactor at Cox's Corner 230 kV		PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

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.

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Eliminate the Sewaren 138 kV bus by installing a new b2276 PSEG (100%) 230 kV bay at Sewaren 230 kV Convert the two 138 kV circuits from Sewaren -Metuchen to 230 kV b2276.1 PSEG (100%) circuits including Lafayette and Woodbridge substation Reconfigure the Metuchen 230 kV station to b2276.2 PSEG (100%) accommodate the two converted circuits Replace disconnect switches at Kilmer, Lake Nilson and Greenbrook b2290 PSEG (100%) 230 kV substations on the Raritian River - Middlesex (I-1023) circuit Replace circuit switcher at Lake Nelson 230 kV b2291 substation on the Raritian PSEG (100%) River - Middlesex (W-1037) circuit Replace the Salem 500 kV b2295 breaker 10X with 63kA PSEG (100%) breaker Install all 69kV lines to interconnect Plainfield, Greenbrook, and b2421 PSEG (100%) Bridgewater stations and establish the 69kV network Install two 18MVAR capacitors at Plainfield b2421.1 PSEG (100%) and S. Second St substation

<sup>\*</sup>Neptune Regional Transmission System, LLC

Install a second four (4)

Required Transmission Enhancements

breaker 69kV ring bus at b2421.2 PSEG (100%) **Bridgewater Switching** Station **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Convert the Bergen – (2.65%) / Dominion (13.03%) / Marion 138 kV path to EKPC (1.77%) / JCPL (3.84%) / double circuit 345 kV and b2436.10 ME (1.93%) / NEPTUNE\* associated substation (0.45%) / OVEC (0.07%) / upgrades PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (100%)

Annual Revenue Requirement

Responsible Customer(s)

**Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Convert the Marion -(2.65%) / Dominion (13.03%) / Bayonne "L" 138 kV EKPC (1.77%) / JCPL (3.84%) / b2436.21 circuit to 345 kV and any ME (1.93%) / NEPTUNE\* associated substation (0.45%) / OVEC (0.07%) / upgrades PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

required Transmission Emiliancements Transmission Exercise Requirement Responsible editionic(s)			
	Load-Ratio Share Allocation:		
	AEC (1.71%) / AEP (14.04%) /		
	APS (5.61%) / ATSI (8.10%) /		
	BGE (4.36%) / ComEd (13.14%)		
	/ Dayton (2.15%) / DEOK		
Convert the Marion	(3.23%) / DL (1.73%) / DPL		
	(2.65%) / Dominion (13.03%) /		
•	EKPC (1.77%) / JCPL (3.84%) /		
•	ME (1.93%) / NEPTUNE*		
	(0.45%) / OVEC (0.07%) /		
. 0	PECO (5.29%) / PENELEC		
	(1.89%) / PEPCO (3.82%) / PPL		
	(4.72%) / PSEG (6.21%) / RE		
	(0.26%)		
	DFAX Allocation:		
	PSEG (96.17%) / RE (3.83%)		
Construct a new Bayway –			
Bayonne 345 kV circuit	PSEG (96.17%) / RE (3.83%)		
and any associated	1 SEG (90.17%) / RE (3.85%)		
substation upgrades			
Construct a new North			
Ave – Bayonne 345 kV	PSEG (96.17%) / RE (3.83%)		
circuit and any associated	1 SEO (70.17/0) / RE (3.83/0)		
aubstation un anadas			
	Convert the Marion - Bayonne "C" 138 kV circuit to 345 kV and any associated substation upgrades  Construct a new Bayway – Bayonne 345 kV circuit and any associated substation upgrades  Construct a new North Ave – Bayonne 345 kV		

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Construct a new North Ave - Airport 345 kV b2436.50 PSEG (100%) circuit and any associated substation upgrades Relocate the underground portion of North Ave -Linden "T" 138 kV circuit b2436.60 to Bayway, convert it to PSEG (96.17%) / RE (3.83%) 345 kV, and any associated substation upgrades Construct a new Airport -Bayway 345 kV circuit b2436.70 PSEG (100%) and any associated substation upgrades **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / Relocate the overhead DPL (2.65%) / Dominion portion of Linden - North Ave "T" 138 kV circuit to (13.03%) / EKPC (1.77%) / b2436.81 Bayway, convert it to 345 JCPL (3.84%) / ME (1.93%) / kV, and any associated NEPTUNE\* (0.45%) / OVEC substation upgrades (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO

> (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%) **DFAX Allocation:** PSEG (96.17%) / RE (3.83%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Convert the Bayway -(2.65%) / Dominion (13.03%) / Linden "Z" 138 kV circuit EKPC (1.77%) / JCPL (3.84%) / to 345 kV and any b2436.83 ME (1.93%) / NEPTUNE\* associated substation (0.45%) / OVEC (0.07%) / upgrades PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (96.17%) / RE (3.83%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Convert the Bayway – (2.65%) / Dominion (13.03%) / Linden "W" 138 kV EKPC (1.77%) / JCPL (3.84%) / circuit to 345 kV and any b2436.84 ME (1.93%) / NEPTUNE\* associated substation (0.45%) / OVEC (0.07%) / upgrades PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (96.17%) / RE (3.83%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Convert the Bayway – (2.65%) / Dominion (13.03%) / Linden "M" 138 kV EKPC (1.77%) / JCPL (3.84%) / b2436.85 circuit to 345 kV and any ME (1.93%) / NEPTUNE\* associated substation (0.45%) / OVEC (0.07%) / upgrades PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (96.17%) / RE (3.83%) **Load-Ratio Share Allocation:** AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL Relocate Farragut -(2.65%) / Dominion (13.03%) / Hudson "B" and "C" 345 EKPC (1.77%) / JCPL (3.84%) / b2436.90 kV circuits to Marion 345 ME (1.93%) / NEPTUNE\* kV and any associated (0.45%) / OVEC (0.07%) / substation upgrades PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)**DFAX Allocation:** PSEG (100%) Relocate the Hudson 2 generation to inject into b2436.91 PSEG (100%) the 345 kV at Marion and any associated upgrades

<sup>\*</sup>Neptune Regional Transmission System, LLC

required Tre	ansimission Linualectricitis Am	idai Revende Requirement	responsible editioner(s)
b2437.10	New Bergen 345/230 kV transformer and any associated substation upgrades		PSEG (100%)
b2437.11	New Bergen 345/138 kV transformer #1 and any associated substation upgrades		PSEG (100%)
b2437.20	New Bayway 345/138 kV transformer #1 and any associated substation upgrades		PSEG (100%)
b2437.21	New Bayway 345/138 kV transformer #2 and any associated substation upgrades		PSEG (100%)
b2437.30	New Linden 345/230 kV transformer and any associated substation upgrades		PSEG (96.17%) / RE (3.83%)
b2437.33	New Bayonne 345/69 kV transformer and any associated substation upgrades		PSEG (100%)
b2438	Install two reactors at Tosco 230 kV		PSEG (100%)
b2439	Replace the Tosco 138kV breaker 'CB1/2 (CBT)' with 63kA		PSEG (100%)
b2474	Rebuild Athenia 138 kV to 80kA		PSEG (100%)
b2589	Install a 100 MVAR 230 kV shunt reactor at Mercer station		PSEG (100%)
b2590	Install two 75 MVAR 230 kV capacitors at Sewaren station		PSEG (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Kequileu 11	ansmission Ennancements Ann	nual Revenue Requirement Responsible Customer(s)
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
	Install an SVC at New	EKPC (1.77%) / JCPL (3.84%) /
b2633.3	Freedom 500 kV	ME (1.93%) / NEPTUNE*
	substation	(0.45%) / OVEC (0.07%) /
		PECO (5.29%) / PENELEC
		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		AEC (0.01%) / DPL (99.98%) /
		JCPL (0.01%)
	Add a new 500 kV bay at Hope Creek (Expansion of Hope Creek substation)	Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
		EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE*
		(0.45%) / OVEC (0.07%) /
b2633.4		PECO (5.29%) / PENELEC
02033.4		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		AEC (8.01%) / BGE (1.94%) /
		DPL (12.99%) / JCPL (13.85%)
		/ ME (5.88%) / NEPTUNE*
		(3.45%) / PECO (17.62%) / PPL
		(14.85%) / PSEG (20.79%) / RE
		(0.62%)
		(0.0270)

		AEC (8.01%) / BGE (1.94%) /		
	Add a new 500/230 kV	DPL (12.99%) / JCPL (13.85%)		
b2633.5	autotransformer at Hope	/ ME (5.88%) / NEPTUNE*		
02033.3	Creek and a new Hope	(3.45%) / PECO (17.62%) / PPL		
	Creek 230 kV substation	(14.85%) / PSEG (20.79%) / RE		
		(0.62%)		
		Load-Ratio Share Allocation:		
		AEC (1.71%) / AEP (14.04%) /		
		APS (5.61%) / ATSI (8.10%) /		
		BGE (4.36%) / ComEd (13.14%)		
	Implement high speed	/ Dayton (2.15%) / DEOK		
	relaying utilizing OPGW	(3.23%) / DL (1.73%) / DPL		
	on Salem – Orchard 500	(2.65%) / Dominion (13.03%) /		
	kV, Hope Creek – New	EKPC (1.77%) / JCPL (3.84%) /		
b2633.8	Freedom 500 kV, New	ME (1.93%) / NEPTUNE*		
	Freedom - Salem 500 kV,	(0.45%) / OVEC (0.07%) /		
	Hope Creek – Salem 500	PECO (5.29%) / PENELEC		
	kV, and New Freedom –	(1.89%) / PEPCO (3.82%) / PPL		
	Orchard 500 kV lines	(4.72%) / PSEG (6.21%) / RE		
		(0.26%)		
		DFAX Allocation:		
		AEC (0.01%) / DPL (99.98%) /		
		JCPL (0.01%)		

<sup>\*</sup>Neptune Regional Transmission System, LLC

		Responsible Customer(s)
	Implement changes to the tap settings for the two	AEC (0.01%) / DPL (99.98%) /
b2633.91	Salem units' step up	JCPL (0.01%)
	transformers	3CIE (0.0170)
	Implement changes to the	
1.0622.02	tap settings for the Hope	AEC (0.01%) / DPL (99.98%) /
b2633.92	Creek unit's step up	JCPL (0.01%)
	transformers	
		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%) /
		APS (5.61%) / ATSI (8.10%) /
		BGE (4.36%) / ComEd (13.14%)
		/ Dayton (2.15%) / DEOK
		(3.23%) / DL (1.73%) / DPL
		(2.65%) / Dominion (13.03%) /
b2702	Install a 350 MVAR reactor	EKPC (1.77%) / JCPL (3.84%) /
02702	at Roseland 500 kV	ME (1.93%) / NEPTUNE*
		(0.45%) / OVEC (0.07%) /
		PECO (5.29%) / PENELEC
		(1.89%) / PEPCO (3.82%) / PPL
		(4.72%) / PSEG (6.21%) / RE
		(0.26%)
		DFAX Allocation:
		PSEG (100%)
b2703	Install a 100 MVAR reactor	PSEG (100%)
02703	at Bergen 230 kV	1 SEG (100%)
1.070.4	Install a 150 MVAR reactor	PGFG (1000)
b2704	at Essex 230 kV	PSEG (100%)
	Install a 200 MVAR reactor	
b2705	(variable) at Bergen 345 kV	PSEG (100%)
	Install a 200 MVAR reactor	
b2706	(variable) at Bayway	PSEG (100%)
02700	345 kV	1523 (100/0)
	Install a 100 MVAR reactor	
b2707	at Bayonne 345 kV	PSEG (100%)
	at Dayonno 3 15 K	

<sup>\*</sup>Neptune Regional Transmission System, LLC

required 11	ansinission Enhancements Anni	adi Neveride Requirement	Responsible Customer(s)
b2712	Replace the Bergen 138 kV '40P'breaker with 80kA breaker		PSEG (100%)
b2713	Replace the Bergen 138 kV '90P' breaker with 80kA breaker		PSEG (100%)
b2722	Reconductor the 1 mile Bergen – Bergen GT 138 kV circuit (B-1302)		PSEG (100%)
b2755	Build a third 345 kV source into Newark Airport		PSEG (100%)
b2810.1	Install second 230/69 kV transformer at Cedar Grove		PSEG (100%)
b2810.2	Build a new 69 kV circuit from Cedar Grove to Great Notch		PSEG (100%)
b2811	Build 69 kV circuit from Locust Street to Delair		PSEG (100%)
b2812	Construct River Road to Tonnelle Avenue 69kV Circuit		PSEG (100%)
b2825.1	Install 2X50 MVAR shunt reactors at Kearny 230 kV substation		PSEG (100%)
b2825.2	Increase the size of the Hudson 230 kV, 2X50 MVAR shunt reactors to 2X100 MVAR		PSEG (100%)
b2825.3	Install 2X100 MVAR shunt reactors at Bayway 345 kV substation		PSEG (100%)
b2825.4	Install 2X100 MVAR shunt reactors at Linden 345 kV substation		PSEG (100%)
b2835	Convert the R-1318 and Q1317 (Edison – Metuchen) 138 kV circuits to one 230 kV circuit		See sub-IDs for cost allocations

Required 118	ansmission Emancements Annu	ai Revenue Requirement	Responsible Customer(s)
b2835.1	Conver the R-1318 and Q- 1317 (Edison – Metuchen) 138 kV circuits to one 230 kV circuit (Brunswick – Meadow Road)		AEC (12.08%) / PECO (22.78%) / PSEG (62.65%) / RE (2.49%)
b2835.2	Convert the R-1318 and Q- 1317 (Edison - Metuchen) 138 kV circuits to one 230 kV circuit (Meadow Road - Pierson Ave)		AEC (11.09%) / PECO (20.90%) / PSEG (65.40%) / RE (2.61%)
b2835.3	Convert the R-1318 and Q- 1317 (Edison - Metuchen) 138 kV circuits to one 230 kV circuit (Pierson Ave - Metuchen)		AEC (10.19%) / PECO (19.21%) / PSEG (67.90%) / RE (2.70%)
b2836	Convert the N-1340 and T- 1372/D-1330 (Brunswick – Trenton) 138 kV circuits to 230 kV circuits		See sub-IDs for cost allocations
b2836.1	Convert the N-1340 and T- 1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Brunswick - Hunterglen)		AEC (22.42%) / PSEG (74.61%) / RE (2.97%)
b2836.2	Convert the N-1340 and T- 1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Hunterglen - Trenton)		AEC (19.58%) / NEPTUNE (80.42%)
b2836.3	Convert the N-1340 and T- 1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Brunswick - Devils Brook)		AEC (100%)
b2836.4	Convert the N-1340 and T- 1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Devils Brook - Trenton)		AEC (100%)

required 11	ansmission Enhancements Annu	dai Revenue Requirement	Responsible Customer(s)
b2837	Convert the F-1358/Z1326 and K1363/Y-1325 (Trenton – Burlington) 138 kV circuits to 230 kV circuits		See sub-IDs for cost allocations
b2837.1	Convert the F-1358/Z-1326 and K-1363/Y-1325 (Trenton - Burlington) 138 kV circuits to 230 kV circuits (Trenton - Yardville K)		NEPTUNE (100%)
b2837.2	Convert the F-1358/Z-1326 and K-1363/Y-1325 (Trenton - Burlington) 138 kV circuits to 230 kV circuits (Yardville - Ward Ave K)		NEPTUNE (100%)
b2837.3	Convert the N-1340 and T- 1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Brunswick - Devils Brook)		NEPTUNE (100%)
b2837.4	Convert the F-1358/Z-1326 and K-1363/Y-1325 (Trenton - Burlington) 138 kV circuits to 230 kV circuits (Crosswicks - Bustleton Y)		NEPTUNE (8.50%) / PSEG (88.00%) / RECO (3.50%)
b2837.5	Convert the F-1358/Z-1326 and K-1363/Y-1325 (Trenton - Burlington) 138 kV circuits to 230 kV circuits (Bustleton - Burlington Y)		NEPTUNE (6.91%) / PSEG (89.53%) / RECO (3.56%)
b2837.6	Convert the F-1358/Z-1326 and K-1363/Y-1325 (Trenton - Burlington) 138 kV circuits to 230 kV circuits (Trenton - Yardville F)		NEPTUNE (100%)

required 11	ansmission Enhancements Annu	iai Revenue Requirement	Responsible Customer(s)
b2837.7	Convert the F-1358/Z-1326 and K-1363/Y-1325 (Trenton - Burlington) 138 kV circuits to 230 kV circuits (Yardville - Ward Ave F)		NEPTUNE (100%)
b2837.8	Convert the F-1358/Z-1326 and K-1363/Y-1325 (Trenton - Burlington) 138 kV circuits to 230 kV circuits (Ward Ave - Crosswicks Z)		NEPTUNE (100%)
b2837.9	Convert the F-1358/Z-1326 and K-1363/Y-1325 (Trenton - Burlington) 138 kV circuits to 230 kV circuits (Crosswicks - Williams Z)		NEPTUNE (100%)
b2837.10	Convert the F-1358/Z-1326 and K-1363/Y-1325 (Trenton - Burlington) 138 kV circuits to 230 kV circuits (Williams - Bustleton Z)		NEPTUNE (8.52%) / PSEG (87.98%) / RECO (3.50%)
b2837.11	Convert the F-1358/Z-1326 and K-1363/Y-1325 (Trenton - Burlington) 138 kV circuits to 230 kV circuits (Bustleton - Burlington Z)		NEPTUNE (6.31%) / PSEG (90.10%) / RECO (3.59%)
b2870	Build new 138/26 kV Newark GIS station in a building (layout #1A) located adjacent to the existing Newark Switch and demolish the existing Newark Switch		PSEG (100%)
b2933	Third Source for Springfield Rd. and Stanley Terrace Stations		See sub-IDs for cost allocations

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b2933.1	Construct a 230/69 kV station at Springfield		PSEG (100%)
b2933.2	Construct a 230/69 kV station at Stanley Terrace		PSEG (100%)
b2933.31	Construct a 69 kV network between Front Street, Springfield and Stanley Terrace (Front Street - Springfield)		NEPTUNE (100%)
b2933.32	Construct a 69 kV network between Front Street, Springfield and Stanley Terrace (Springfield – Stanley Terrace)		PSEG (100%)
b2934	Build a new 69 kV line between Hasbrouck Heights and Carlstadt		PSEG (100%)
b2935	Third Supply for Runnemede 69 kV and Woodbury 69 kV		PSEG (100%)
b2935.1	Build a new 230/69 kV switching substation at Hilltop utilizing the PSE&G property and the K-2237 230 kV line		PSEG (100%)
b2935.2	Build a new line between Hilltop and Woodbury 69 kV providing the 3rd supply		PSEG (100%)

Required 11	•	ual Revenue Requirement	Responsible Customer(s)
b2935.3	Convert Runnemede's straight bus to a ring bus and construct a 69 kV line from Hilltop to Runnemede 69 kV		PSEG (100%)
b2955	Wreck and rebuild the VFT  - Warinanco - Aldene 230 kV circuit with paired conductor		JCPL (43.23%) / NEPTUNE* (3.54%) / PSEG (51.19%) / RE (2.04%)
b2956	Replace existing cable on Cedar Grove - Jackson Rd. with 5000kcmil XLPE cable		PSEG (100%)
b2982	Construct a 230/69 kV station at Hillsdale Substation and tie to Paramus and Dumont at 69 kV		PSEG (100%)
b2982.1	Install a 69 kV ring bus and one (1) 230/69 kV transformer at Hillsdale		PSEG (100%)
b2982.2	Construct a 69 kV network between Paramus, Dumont, and Hillsdale Substation using existing 69 kV circuits		PSEG (100%)
b2983	Convert Kuller Road to a 69/13 kV station		PSEG (100%)
b2983.1	Install 69 kV ring bus and two (2) 69/13 kV transformers at Kuller Road		PSEG (100%)
b2983.2	Construct a 69 kV network between Kuller Road, Passaic, Paterson, and Harvey (new Clifton area switching station)		PSEG (100%)
b2986	Replace the existing Roseland – Branchburg – Pleasant Valley 230 kV corridor with new structures		See sub-IDs for cost allocations

required 11	ansimission Emiancements Aimi	iai Kevenue Kequitement	Responsible Customer(s)
b2986.11	Roseland-Branchburg 230 kV corridor rebuild		PSEG (100%)
	(Roseland - Readington)		
	Roseland-Branchburg		
b2986.12	230kV corridor rebuild		JCPL (100%)
	(Readington - Branchburg)		
	Branchburg-Pleasant Valley		
b2986.21	230kV corridor rebuild		DECO (1000/)
02986.21	(Branchburg - East		PECO (100%)
	Flemington)		
	Branchburg-Pleasant Valley		
1 200 6 22	230kV corridor rebuild		NEPTUNE (0.77%) / PECO
b2986.22	(East Flemington - Pleasant		(99.23%)
	Valley)		,
	Branchburg-Pleasant Valley		JCPL (31.39%) / NEPTUNE
1-2006 22	230kV corridor rebuild		(5.26%) / PECO (6.68%) /
b2986.23	(Pleasant Valley -		PSEG (54.43%) / RECO
	Rocktown)		(2.23%)
	Branchburg-Pleasant Valley		JCPL (37.95%) / NEPTUNE
1 200 6 24	230kV corridor rebuild (the		(4.70%) / PECO (5.38%) /
b2986.24	PSEG portion of Rocktown		PSEG (49.92%) / RECO
	- Buckingham)		(2.05%)
	Construct a 230/69 kV		
b3003	station at Maywood		PSEG (100%)
	Purchase properties at		
b3003.1	Maywood to accommodate		PSEG (100%)
	new construction		1 SEG (10070)
b3003.2	Extend Maywood 230 kV		
	bus and install one (1) 230		PSEG (100%)
	kV breaker		1525 (10070)
b3003.3	Install one (1) 230/69 kV		PSEG (100%)
	transformer at Maywood		

required Tre	ansimission Emianeements Anni	iai Revenue Requirement	Responsible Customer(s)
b3003.4	Install Maywood 69 kV ring bus		PSEG (100%)
b3003.5	Construct a 69 kV network between Spring Valley Road, Hasbrouck Heights, and Maywood		PSEG (100%)
b3004	Construct a 230/69/13 kV station by tapping the Mercer – Kuser Rd 230 kV circuit		PSEG (100%)
b3004.1	Install a new Clinton 230 kV ring bus with one (1) 230/69 kV transformer Mercer - Kuser Rd 230 kV circuit		PSEG (100%)
b3004.2	Expand existing 69 kV ring bus at Clinton Ave with two (2) additional 69 kV breakers		PSEG (100%)
b3004.3	Install two (2) 69/13 kV transformers at Clinton Ave		PSEG (100%)
b3004.4	Install 18 MVAR capacitor bank at Clinton Ave 69 kV		PSEG (100%)
b3025	Construct two (2) new 69/13 kV stations in the Doremus area and relocate the Doremus load to the new stations		PSEG (100%)

b3025.1	Install a new 69/13 kV station (Vauxhall) with a	PSEG (100%)
03023.1	ring bus configuration	13EG (100%)
	Install a new 69/13 kV	
b3025.2	station (19th Ave) with a	PSEG (100%)
	ring bus configuration	
	Construct a 69 kV network	
	between Stanley Terrace,	
b3025.3	Springfield Road,	PSEG (100%)
	McCarter, Federal Square,	PSEG (100%)
	and the two new stations	
	(Vauxhall & 19th Ave)	

#### SCHEDULE 12 – APPENDIX A

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

Required Transmission Enhancements Responsible Customer(s) Annual Revenue Requirement Reconductor 0.33 miles of the Parkersburg - Belpre b2117 line and upgrade APS (100%) Parkersburg terminal equipment Add 44 MVAR Cap at New b2118 APS (100%) Martinsville Six-Wire Lake Lynn b2120 APS (100%) Lardin 138 kV circuits Replace Weirton 138 kV breaker "Wylie Ridge 210" b2142 APS (100%) with 63 kA breaker Replace Weirton 138 kV breaker "Wylie Ridge 216" b2143 APS (100%) with 63 kA breaker Replace relays at Mitchell b2174.8 APS (100%) substation Replace primary relay at b2174.9 APS (100%) Piney Fork substation Perform relay setting changes at Bethel Park b2174.10 APS (100%) substation Armstrong Substation: Relocate 138 kV controls b2213 from the generating station APS (100%) building to new control building Albright Substation: Install a new control building in the switchyard and relocate b2214 controls and SCADA APS (100%) equipment from the generating station building the new control center Rivesville Switching Station: Relocate controls and SCADA equipment b2215 APS (100%) from the generating station building to new control building

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Willow Island: Install a new 138 kV cross bus at Belmont Substation and reconnect and reconfigure b2216 APS (100%) the 138 kV lines to facilitate removal of the equipment at Willow Island switching station 130 MVAR reactor at b2235 APS (100%) Monocacy 230 kV Install a 32.4 MVAR b2260 APS (100%) capacitor at Bartonville Install a 33 MVAR b2261 APS (100%) capacitor at Damascus Replace 1000 Cu substation conductor and 1200 amp b2267 APS (100%) wave trap at Marlowe Reconductor 6.8 miles of 138kV 336 ACSR with 336 b2268 APS (100%) ACSS from Double Toll Gate to Riverton Reconductor from Collins b2299 Ferry - West Run 138 kV APS (100%) with 556 ACSS Reconductor from Lake b2300 APS (100%) Lynn - West Run 138 kV Install 39.6 MVAR b2341 Capacitor at Shaffers Corner APS (100%) 138 kV Substation Construct a new 138 kV switching station (Shuman Hill substation), which is b2342 APS (100%) next the Mobley 138 kV substation and install a 31.7 MVAR capacitor Install a 31.7 MVAR b2343 capacitor at West Union 138 APS (100%) kV substation

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install a 250 MVAR SVC at b2362 APS (100%) Squab Hollow 230 kV Install a 230 kV breaker at b2362.1 Squab Hollow 230 kV APS (100%) substation Convert the Shingletown 230 kV bus into a 6 breaker b2363 APS (100%) ring bus Install a new 230/138 kV transformer at Squab Hollow 230 kV substation. Loop the Forest - Elko 230 b2364 APS (100%) kV line into Squab Hollow. Loop the Brookville - Elko 138 kV line into Squab Hollow Install a 44 MVAR 138 kV b2412 capacitor at the Hempfield APS (100%) 138 kV substation Install breaker and a half 138 kV substation (Waldo Run) with 4 breakers to accommodate service to b2433.1 APS (100%) MarkWest Sherwood Facility including metering which is cut into Glen Falls Lamberton 138 kV line Install a 70 MVAR SVC at b2433.2 the new WaldoRun 138 kV APS (100%) substation Install two 31.7 MVAR capacitors at the new b2433.3 APS (100%) WaldoRun 138 kV substation Replace the Weirton 138 kV b2424 breaker 'WYLIE RID210' APS (100%) with 63 kA breakers Replace the Weirton 138 kV b2425 breaker 'WYLIE RID216' APS (100%) with 63 kA breakers

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace the Oak Grove 138 b2426 kV breaker 'OG1' with 63 APS (100%) kA breakers Replace the Oak Grove 138 kV breaker 'OG2' with 63 b2427 APS (100%) kA breakers Replace the Oak Grove 138 kV breaker 'OG3' with 63 b2428 APS (100%) kA breakers Replace the Oak Grove 138 b2429 kV breaker 'OG4' with 63 APS (100%) kA breakers Replace the Oak Grove 138 b2430 kV breaker 'OG5' with 63 APS (100%) kA breakers Replace the Oak Grove 138 kV breaker 'OG6' with 63 b2431 APS (100%) kA breakers Replace the Ridgeley 138 kV breaker 'RC1' with a 40 b2432 APS (100%) kA rated breaker Replace the Cabot 138kV breaker 'C9-KISKI VLY' b2440 APS (100%) with 63kA Replace the Ringgold 138 kV breaker 'RCM1' with b2472 APS (100%) 40kA breakers Replace the Ringgold 138 b2473 kV breaker '#4 XMFR' with APS (100%) 40kA breakers Construct a new line between Oak Mound 138 b2475 APS (100%) kV substation and Waldo Run 138 kV substation Construct a new 138 kV substation (Shuman Hill b2545.1 substation) connected to the APS (100%) Fairview -Willow Island (84) 138 kV line

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install a ring bus station with five active positions and two 52.8 MVAR b2545.2 APS (100%) capacitors with 0.941 mH reactors Install a +90/-30 MVAR b2545.3 SVC protected by a 138 kV APS (100%) breaker Remove the 31.7 MVAR b2545.4 capacitor bank at Mobley APS (100%) 138 kV Install a 51.8 MVAR (rated) 138 kV capacitor at b2546 APS (100%) Nyswaner 138 kV substation Construct a new 138 kV six b2547.1 breaker ring bus Hillman APS (100%) substation Loop Smith-Imperial 138 kV line into the new b2547.2 APS (100%) Hillman substation Install +125/-75 MVAR b2547.3 APS (100%) SVC at Hillman substation Install two 31.7 MVAR 138 b2547.4 APS (100%) kV capacitors Eliminate clearance de-rate on Wylie Ridge – Smith 138 kV line and upgrade b2548 APS (100%) terminals at Smith 138 kV, new line ratings 294 MVA (Rate A)/350 MVA (Rate B) Relocate All Dam 6 138 kV line and the 138 kV line to b2612.1 APS (100%) AE units 1&2 Install 138 kV, 3000A bustie breaker in the open busb2612.2 APS (100%) tie position next to the Shaffers corner 138 kV line

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Install a 6-pole manual switch, foundation, control b2612.3 APS (100%) cable, and all associated facilities Yukon 138 kV Breaker b2666 APS (100%) Replacement Replace Yukon 138 kV breaker "Y-11(CHARL1)" b2666.1 APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-13(BETHEL)" b2666.2 APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-18(CHARL2)" b2666.3 APS (100%) with an 80 kA breaker Replace Yukon 138 kV b2666.4 breaker "Y-19(CHARL2)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-4(4B-2BUS)" b2666.5 APS (100%) with an 80 kA breaker Replace Yukon 138 kV b2666.6 breaker "Y-5(LAYTON)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV b2666.7 breaker "Y-8(HUNTING)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV b2666.8 breaker "Y-9(SPRINGD)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV b2666.9 breaker "Y-10(CHRL-SP)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-12(1-1BUS)" b2666.10 APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-14(4-1BUS)" b2666.11 APS (100%)

with an 80 kA breaker

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Replace Yukon 138 kV b2666.12 breaker "Y-2(1B-BETHE)" APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker "Y-21(SHEPJ)" b2666.13 APS (100%) with an 80 kA breaker Replace Yukon 138 kV breaker b2666.14 APS (100%) "Y-22(SHEPHJT)" with an 80 kA breaker Change CT Ratio at Seneca Caverns from 120/1 to 160/1 b2672 APS (100%) and adjust relay settings accordingly AEP (12.91%) / APS (19.04%) / ATSI (1.24%) / ComEd (0.35%) / Carroll Substation: Replace the Germantown 138 kV Dayton (1.45%) / DEOK b2688.3 wave trap, upgrade the bus (2.30%) / DL (1.11%) / conductor and adjust CT Dominion (44.85%) / ratios EKPC (0.78%) / PEPCO (15.85%) / RECO (0.12%)Upgrade terminal equipment b2689.3 APS (100%) at structure 27A Upgrade 138 kV substation equipment at Butler, Shanor Manor and Krendale b2696 substations. New rating of APS (100%) line will be 353 MVA summer normal/422 MVA emergency Remove existing Black Oak b2700 APS (100%) **SPS** AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton Reconfigure the Ringgold b2743.6 230 kV substation to double (0.59%) / DEOK (1.02%) bus double breaker scheme / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)

Required Tr	ansmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2743.6.1	Replace the two Ringgold 230/138 kV transformers		AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK (1.02%) / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)
b2743.7	Rebuild/Reconductor the Ringgold – Catoctin 138 kV circuit and upgrade terminal equipment on both ends		AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK (1.02%) / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)
b2747.1	Relocate the FirstEnergy Pratts 138 kV terminal CVTs at Gordonsville substation to allow for the installation of a new motor operated switch being installed by Dominion		APS (100%)
b2763	Replace the breaker risers and wave trap at Bredinville 138 kV substation on the Cabrey Junction 138 kV terminal		APS (100%)
b2764	Upgrade Fairview 138 kV breaker risers and disconnect leads; Replace 500 CU breaker risers and 556 ACSR disconnect leads with 795 ACSR		APS (100%)
b2964.1	Replace terminal equipment at Pruntytown and Glen Falls 138 kV station		APS (100%)
b2964.2	Reconductor approximately 8.3 miles of the McAlpin - White Hall Junction 138 kV circuit		APS (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Reconductor the Charleroi – Allenport 138 kV line with b2965 954 ACSR conductor. DL (100%) Replace breaker risers at Charleroi and Allenport Reconductor the Yukon -Smithton – Shepler Hill Jct b2966 138 kV line with 795 ACSS APS (100%) conductor. Replace Line Disconnect Switch at Yukon Reconductor the Yukon -Smithton - Shepler Hill Jct 138 kV line and replace b2966.1 APS (100%) terminal equipment as necessary to achieve required rating Convert the existing 6 wire Butler - Shanor Manor -Krendale 138 kV line into b2967 two separate 138 kV lines. APS (100%) New lines will be Butler -Keisters and Butler - Shanor Manor - Krendale 138 kV Ringgold – Catoctin b2970 APS (100%) Solution Install two new 230 kV b2970.1 positions at Ringgold for APS (100%) 230/138 kV transformers Install new 230 kV position b2970.2 for Ringgold – Catoctin 230 APS (100%) kV line Install one new 230 kV b2970.3 breaker at Catoctin APS (100%) substation Install new 230/138 kV transformer at Catoctin b2970.4 substation. Convert APS (100%) Ringgold - Catoctin 138 kV line to 230 kV operation

b2970.5	Convert Garfield 138/12.5 kV	APS (100%)
02970.3	substation to 230/12.5 kV	Al 5 (100%)
b2996	Construct new Flint Run 500/138	See sub-IDs for cost
02990	kV substation	allocations
	Construct a new 500/138 kV	
	substation as a 4-breaker ring bus	
	with expansion plans for double-	
	breaker-double-bus on the 500	
	kV bus and breaker-and-a-half on	
	the 138 kV bus to provide EHV	
	source to the Marcellus shale	
	load growth area. Projected load	
	growth of additional 160 MVA to	
	current plan of 280 MVA, for a	
	total load of 440 MVA served	
b2996.1	from Waldo Run substation.	A DC (1000/)
02990.1	Construct additional 3-breaker	APS (100%)
	string at Waldo Run 138 kV bus.	
	Relocate the Sherwood #2 line	
	terminal to the new string.	
	Construct two single circuit Flint	
	Run - Waldo Run 138 kV lines	
	using 795 ACSR (approximately	
	3 miles). After terminal	
	relocation on new 3-breaker	
	string at Waldo Run, terminate	
	new Flint Run 138 kV lines onto	
	the two open terminals	
	Loop the Belmont – Harrison 500	
	kV line into and out of the new	
	Flint Run 500 kV substation (less	
b2996.2	than 1 mile). Replace primary	APS (100%)
	relaying and carrier sets on	
	Belmont and Harrison 500 kV	
	remote end substations	
	Upgrade two (2) existing 138 kV	
b2996.3	breakers (Rider 50 and #1/4	APS (100%)
02/30.3	transformer breaker) at Glen Falls	Ai 5 (10070)
	with 63 kA 3000A units	

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s) Reconductor 3.1 mile 556 ACSR portion of Cabot to Butler 138 kV with 556 ACSS and upgrade terminal equipment. 3.1 miles of b3005 APS (100%) line will be reconductored for this project. The total length of the line is 7.75 miles Replace four Yukon 500/138 kV transformers with three APS (73.55%) / DL b3006 transformers with higher rating (26.45%)and reconfigure 500 kV bus Reconductor the Blairsville East to Social Hall 138 kV line and upgrade terminal equipment -AP portion. 4.8 miles total. The new conductor will be 636 b3007.1 APS (100%) ACSS replacing the existing 636 ACSR conductor. At Social Hall, meters, relays, bus conductor, a wave trap, circuit breaker and disconnects will be replaced Replace terminal equipment at Keystone and Cabot 500 kV buses. At Keystone, bus tubing b3010 and conductor, a wave trap, and APS (100%) meter will be replaced. At Cabot, a wave trap and bus conductor will be replaced Construct new Route 51 b3011.1 substation and connect 10 138 DL (100%) kV lines to new substation Upgrade terminal equipment at Yukon to increase rating on b3011.2 Yukon to Charleroi #2 138 kV DL (100%) line (New Yukon to Route 51 #4 138 kV line)

Required 11a	nsmission Enhancements Annual I	Revenue Requirement	responsi	ble Customer(s)
	Upgrade terminal equipment at Yukon to increase rating on			
b3011.3	Yukon to Route 51 #1 138 kV			DL (100%)
	line			
	Upgrade terminal equipment			
b3011.4	at Yukon to increase rating on			DL (100%)
03011.4	Yukon to Route 51 #2 138 kV			DL (100%)
	line			
	Upgrade terminal equipment			
b3011.5	at Yukon to increase rating on			DL (100%)
03011.3	Yukon to Route 51 #3 138 kV			DL (10070)
	line			
	Upgrade remote end relays for			
b3011.6	Yukon – Allenport – Iron			DL (100%)
	Bridge 138 kV line			
	Construct two new 138 kV			
	ties with the single structure			
	from APS's new substation to			
b3012.1	Duquesne's new substation.		A	ATSI (38.21%) / DL
	The estimated line length is			(61.79%)
	approximately 4.7 miles. The			
	line is planned to use multiple			
	ACSS conductors per phase			
	Construct a new Elrama –			
b3012.3	Route 51 138 kV No.3 line:			
	reconductor 4.7 miles of the			
	existing line, and construct			DL (100%)
	1.5 miles of a new line to the			` ,
	reconductored portion. Install			
	a new line terminal at APS			
	Route 51 substation			

Required Tra	nsmission Ennancements Annual I	Revenue Requirement - F	Responsible Customer(s)
b3013	Reconductor Vasco Tap to Edgewater Tap 138 kV line. 4.4 miles. The new conductor will be 336 ACSS replacing the existing 336 ACSR conductor		APS (100%)
b3015.6	Reconductor Elrama to Mitchell 138 kV line – AP portion. 4.2 miles total. 2x 795 ACSS/TW 20/7		DL (100%)
b3015.8	Upgrade terminal equipment at Mitchell for Mitchell – Elrama 138 kV line		APS (100%)
b3028	Upgrade substation disconnect leads at William 138 kV substation		APS (100%)
b3051.1	Ronceverte cap bank and terminal upgrades		APS (100%)
b3052	Install a 138 kV capacitor (29.7 MVAR effective) at West Winchester 138 kV		APS (100%)
b3064.3	Upgrade line relaying at Piney Fork and Bethel Park for Piney For – Elrama 138 kV line and Bethel Park – Elrama 138 kV		APS (100%)

Required Fra	insmission Enhancements Annual	Revenue Requirement	Responsible Customer(s)
	Reconductor the Yukon –		
	Westraver 138 kV line (2.8		
b3068	miles), replace the line drops		APS (100%)
03000	and relays at Yukon 138 kV		711 5 (10070)
	and replace switches at		
	Westraver 138 kV bus		
	Reconductor the Westraver –		
	Route 51 138 kV line (5.63		
b3069	miles) and replace line		APS (100%)
	switches at Westraver 138 kV		
	bus		
	Reconductor the Yukon –		
	Route 51 #1 138 kV line (8		
b3070	miles), replace the line drops,		APS (100%)
	relays and line disconnect		
	switch at Yukon 138 kV bus		
	Reconductor the Yukon –		
h2071	Route 51 #2 138 kV line (8		ADC (1000/)
b3071	miles) and replace relays at		APS (100%)
	Yukon 138 kV bus		
	Reconductor the Yukon –		
b3072	Route 51 #3 138 kV line (8		ABS (100%)
03072	miles) and replace relays at		APS (100%)
	Yukon 138 kV bus		
h2074	Reconductor the 138 kV bus		A DC (1000/)
b3074	at Armstrong substation		APS (100%)
	Replace the 500/138 kV		
b3075	transformer breaker and		ABS (1000/)
03073	reconductor 138 kV bus at		APS (100%)
	Cabot substation		
	Reconductor the Edgewater –		
b3076	Loyalhanna 138 kV line (0.67		APS (100%)
	mile)		, ,
1,2070	Replace the Wylie Ridge		ATSI (72.30%) / DL
b3079	500/345 kV transformer #7		(27.70%)
	Reconductor the 138 kV bus		
1,2002	at Butler and reconductor the		A DC (1000()
b3083	138 kV bus and replace line		APS (100%)
	trap at Karns City		
	· • • • • • • • • • • • • • • • • • • •		ı

	Relocate 34.5 kV lines from	
b3128	generating station roof R.	APS (100%)
	Paul Smith 138 kV station	

#### **SCHEDULE 12 – APPENDIX A**

(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)

b1570.4	Add a 345 kV breaker at Marysville station and a 0.1 mile 345 kV line extension from Marysville to the new 345/69 kV Dayton transformer	AEP (100%)
b1660.1	Cloverdale: install 6-765 kV breakers, incremental work for 2 additional breakers, reconfigure and relocate miscellaneous facilities, establish 500 kV station and 500 kV tie with 765 kV station	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: Dayton (8.37%) / DEOK (21.94%) / Dominion (56.40%) / EKPC (13.29%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

required 11a		an revenue requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
			DEOK (3.23%) / DL (1.73%) /
			DPL (2.65%) / Dominion
			(13.03%) / EKPC (1.77%) /
	Reconductor the AEP		JCPL (3.84%) / ME (1.93%) /
b1797.1	portion of the Cloverdale -		NEPTUNE* (0.45%) / OVEC
01/7/.1	Lexington 500 kV line with		(0.07%) / PECO (5.29%) /
	2-1780 ACSS		PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			AEP (0.79%) / APS (53.70%) /
			Dayton (0.15%) / DEOK
			(0.40%) / Dominion (1.13%) /
			EKPC (0.23%) / PEPCO
			(43.60%)
b2055	Upgrade relay at Brues		AEP (100%)
02033	station		71L1 (10070)
	Upgrade terminal		
	equipment at Howard on		
b2122.3	the Howard - Brookside		AEP (100%)
	138 kV line to achieve		
	ratings of 252/291 (SN/SE)		
	Perform a sag study on the		
b2122.4	Howard - Brookside 138		AEP (100%)
	kV line		
b2229	Install a 300 MVAR		AEP (100%)
02223	reactor at Dequine 345 kV		ALI (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 11	ansmission Ennancements Annu	iai Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
	Replace existing 150		DEOK (3.23%) / DL (1.73%) /
	MVAR reactor at Amos 765		DPL (2.65%) / Dominion
b2230	kV substation on Amos - N.		(13.03%) / EKPC (1.77%) /
02230	Proctorville - Hanging Rock		JCPL (3.84%) / ME (1.93%) /
	with 300 MVAR reactor		NEPTUNE* (0.45%) / OVEC
	with 500 W VAR reactor		(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			AEP (100%)
	Install 765 kV reactor		
b2231	breaker at Dumont 765 kV		AEP (100%)
02231	substation on the Dumont -		ALI (100%)
	Wilton Center line		
	Install 765 kV reactor		
	breaker at Marysville 765		
b2232	kV substation on the		AEP (100%)
	Marysville - Maliszewski		
	line		
	Change transformer tap		
b2233	settings for the Baker		AEP (100%)
	765/345 kV transformer		
	Loop the North Muskingum		
b2252	- Crooksville 138 kV line		
	into AEP's Philo 138 kV		AEP (100%)
	station which lies		ALI (100/0)
	approximately 0.4 miles		
	from the line		

<sup>\*</sup>Neptune Regional Transmission System, LLC

required 11	ansinission Emancements Ami	iai Kevenue Requirement	Responsible Customer(s)
b2253	Install an 86.4 MVAR capacitor bank at Gorsuch		AEP (100%)
02200	138 kV station in Ohio		122 (10070)
	Rebuild approximately 4.9		
b2254	miles of Corner - Degussa		AEP (100%)
	138 kV line in Ohio		
	Rebuild approximately 2.8		
b2255	miles of Maliszewski -		AEP (100%)
	Polaris 138 kV line in Ohio		
	Upgrade approximately 36		
	miles of 138 kV through		. ==
b2256	path facilities between		AEP (100%)
	Harrison 138 kV station and		
	Ross 138 kV station in Ohio		
	Rebuild the Pokagon -		
	Corey 69 kV line as a		
1.0057	double circuit 138 kV line		A ED (1000()
b2257	with one side at 69 kV and		AEP (100%)
	the other side as an express		
	circuit between Pokagon		
	and Corey stations		
	Rebuild 1.41 miles of #2		
	CU 46 kV line between Tams Mountain - Slab Fork		
b2258	to 138 kV standards. The		AEP (100%)
	line will be strung with		
	1033 ACSR		
	Install a new 138/69 kV		
	transformer at George		
	Washington 138/69 kV		
b2259	substation to provide		AEP (100%)
	support to the 69 kV system		
	in the area		
	Rebuild 4.7 miles of		
	Muskingum River - Wolf		
b2286	Creek 138 kV line and		AED (1000/)
	remove the 138/138 kV		AEP (100%)
	transformer at Wolf Creek		
	Station		

required 11	ansimission Emiancements Annu	ai Revenue Requirement	responsible editioner(s)
b2287	Loop in the Meadow Lake - Olive 345 kV circuit into Reynolds 765/345 kV station		AEP (100%)
b2344.1	Establish a new 138/12 kV station, transfer and consolidate load from its Nicholsville and Marcellus 34.5 kV stations at this new station		AEP (100%)
b2344.2	Tap the Hydramatic – Valley 138 kV circuit (~ structure 415), build a new 138 kV line (~3.75 miles) to this new station		AEP (100%)
b2344.3	From this station, construct a new 138 kV line (~1.95 miles) to REA's Marcellus station		AEP (100%)
b2344.4	From REA's Marcellus station construct new 138 kV line (~2.35 miles) to a tap point on Valley – Hydramatic 138 kV ckt (~structure 434)		AEP (100%)
b2344.5	Retire sections of the 138 kV line in between structure 415 and 434 (~ 2.65 miles)		AEP (100%)
b2344.6	Retire AEP's Marcellus 34.5/12 kV and Nicholsville 34.5/12 kV stations and also the Marcellus – Valley 34.5 kV line		AEP (100%)
b2345.1	Construct a new 69 kV line from Hartford to Keeler (~8 miles)		AEP (100%)

- toquired Tit	ansimission Emiancements Amilu	ai revenue requirement	Responsible Customer(s)
b2345.2	Rebuild the 34.5 kV lines between Keeler - Sister Lakes and Glenwood tap switch to 69 kV (~12 miles)		AEP (100%)
b2345.3	Implement in - out at Keeler and Sister Lakes 34.5 kV stations		AEP (100%)
b2345.4	Retire Glenwood tap switch and construct a new Rothadew station. These new lines will continue to operate at 34.5 kV		AEP (100%)
b2346	Perform a sag study for Howard - North Bellville - Millwood 138 kV line including terminal equipment upgrades		AEP (100%)
b2347	Replace the North Delphos 600A switch. Rebuild approximately 18.7 miles of 138 kV line North Delphos - S073. Reconductor the line and replace the existing tower structures		AEP (100%)
b2348	Construct a new 138 kV line from Richlands Station to intersect with the Hales Branch - Grassy Creek 138 kV circuit		AEP (100%)
b2374	Change the existing CT ratios of the existing equipment along Bearskin - Smith Mountain 138kV circuit		AEP (100%)
b2375	Change the existing CT ratios of the existing equipment along East Danville-Banister 138kV circuit		AEP (100%)

b2376	Replace the Turner 138 kV	AEP (100%)
b2377	breaker 'D' Replace the North Newark	AEP (100%)
02311	138 kV breaker 'P'	7121 (10070)
b2378	Replace the Sporn 345 kV breaker 'DD'	AEP (100%)
b2379	Replace the Sporn 345 kV breaker 'DD2'	AEP (100%)
b2380	Replace the Muskingum 345 kV breaker 'SE'	AEP (100%)
b2381	Replace the East Lima 138 kV breaker 'E1'	AEP (100%)
b2382	Replace the Delco 138 kV breaker 'R'	AEP (100%)
b2383	Replace the Sporn 345 kV breaker 'AA2'	AEP (100%)
b2384	Replace the Sporn 345 kV breaker 'CC'	AEP (100%)
b2385	Replace the Sporn 345 kV breaker 'CC2'	AEP (100%)
b2386	Replace the Astor 138 kV breaker '102'	AEP (100%)
b2387	Replace the Muskingum 345 kV breaker 'SH'	AEP (100%)
b2388	Replace the Muskingum 345 kV breaker 'SI'	AEP (100%)
b2389	Replace the Hyatt 138 kV breaker '105N'	AEP (100%)
b2390	Replace the Muskingum 345 kV breaker 'SG'	AEP (100%)
b2391	Replace the Hyatt 138 kV breaker '101C'	AEP (100%)
b2392	Replace the Hyatt 138 kV breaker '104N'	AEP (100%)
b2393	Replace the Hyatt 138 kV breaker '104S'	AEP (100%)

Kequiled 11	ansmission Ennancements Annu	iai Revenue Requirement	Responsible Customer(s)
b2394	Replace the Sporn 345 kV breaker 'CC1'		AEP (100%)
b2409	Install two 56.4 MVAR capacitor banks at the Melmore 138 kV station in Ohio		AEP (100%)
b2410	Convert Hogan Mullin 34.5 kV line to 138 kV, establish 138 kV line between Jones Creek and Strawton, rebuild existing Mullin Elwood 34.5 kV and terminate line into Strawton station, retire Mullin station		AEP (100%)
b2411	Rebuild the 3/0 ACSR portion of the Hadley - Kroemer Tap 69 kV line utilizing 795 ACSR conductor		AEP (100%)
b2423	Install a 300 MVAR shunt reactor at AEP's Wyoming 765 kV station		Load-Ratio Share Allocation:  AEC (1.71%) / AEP (14.04%) /  APS (5.61%) / ATSI (8.10%) /  BGE (4.36%) / ComEd (13.14%)

Required 11	ansmission Enhancements Annu	iai Revenue Requirement	Responsible Customer(s)
b2444	Willow - Eureka 138 kV line: Reconductor 0.26 mile of 4/0 CU with 336 ACSS		AEP (100%)
b2445	Complete a sag study of Tidd - Mahans Lake 138 kV line		AEP (100%)
b2449	Rebuild the 7-mile 345 kV line between Meadow Lake and Reynolds 345 kV stations		AEP (100%)
b2462	Add two 138 kV circuit breakers at Fremont station to fix tower contingency '408 2'		AEP (100%)
b2501	Construct a new 138/69 kV Yager station by tapping 2- 138 kV FE circuits (Nottingham-Cloverdale, Nottingham-Harmon)		AEP (100%)
b2501.2	Build a new 138 kV line from new Yager station to Azalea station		AEP (100%)
b2501.3	Close the 138 kV loop back into Yager 138 kV by converting part of local 69 kV facilities to 138 kV		AEP (100%)
b2501.4	Build 2 new 69 kV exits to reinforce 69 kV facilities and upgrade conductor between Irish Run 69 kV Switch and Bowerstown 69 kV Switch		AEP (100%)

required 11		iai Kevenue Kequitemeni	Responsible Customer(s)
	Construct new 138 kV		
	switching station		
	Nottingham tapping 6-138		
	kV FE circuits (Holloway-		
	Brookside, Holloway-		
b2502.1	Harmon #1 and #2,		AEP (100%)
	Holloway-Reeds,		
	Holloway-New Stacy,		
	Holloway-Cloverdale). Exit		
	a 138 kV circuit from new		
	station to Freebyrd station		
h2502.2	Convert Freebyrd 69 kV to		AED (1000/)
b2502.2	138 kV		AEP (100%)
	Rebuild/convert Freebyrd-		
b2502.3	South Cadiz 69 kV circuit		AEP (100%)
	to 138 kV		
b2502.4	Upgrade South Cadiz to 138		AED (1000/)
02302.4	kV breaker and a half		AEP (100%)
	Replace the Sporn 138 kV		
b2530	breaker 'G1' with 80kA		AEP (100%)
	breaker		
	Replace the Sporn 138 kV		
b2531	breaker 'D' with 80kA		AEP (100%)
	breaker		
	Replace the Sporn 138 kV		
b2532	breaker 'O1' with 80kA		AEP (100%)
	breaker		
	Replace the Sporn 138 kV		
b2533	breaker 'P2' with 80kA		AEP (100%)
	breaker		
	Replace the Sporn 138 kV		
b2534	breaker 'U' with 80kA		AEP (100%)
	breaker		
	Replace the Sporn 138 kV		
b2535	breaker 'O' with 80 kA		AEP (100%)
	breaker		

Required 11	ansmission Enhancements Anni	uai Revenue Requirement	Responsible Customer(s)
b2536	Replace the Sporn 138 kV breaker 'O2' with 80 kA		AED (1000/)
02330	breaker O2 with 80 kA		AEP (100%)
	Replace the Robinson Park		
	138 kV breakers A1, A2,		
b2537	B1, B2, C1, C2, D1, D2,		AEP (100%)
	E1, E2, and F1 with 63 kA		
	breakers		
	Reconductor 0.5 miles		
	Tiltonsville – Windsor 138		
b2555	kV and string the vacant side of the 4.5 mile section		AEP (100%)
	using 556 ACSR in a six		
	wire configuration		
	Install two 138 kV prop		
	structures to increase the		
1-2556	maximum operating		AED (1000/)
b2556	temperature of the Clinch		AEP (100%)
	River- Clinch Field 138 kV		
	line		
	Temporary operating		
	procedure for delay of		
	upgrade b1464. Open the		
b2581	Corner 138 kV circuit breaker 86 for an overload		
	of the Corner – Washington		
	MP 138 kV line. The tower		AEP (100%)
	contingency loss of		
	Belmont – Trissler 138 kV		
	and Belmont – Edgelawn		
	138 kV should be added to		
	Operational contingency		

1	Construct a pays 60 la V line		
	Construct a new 69 kV line		
	approximately 2.5 miles		
1.0501	from Colfax to Drewry's.		AED (1000()
b2591	Construct a new Drewry's		AEP (100%)
	station and install a new		
	circuit breaker at Colfax		
	station.		
	Rebuild existing East		
	Coshocton – North		
	Coshocton double circuit		
b2592	line which contains		AEP (100%)
02392	Newcomerstown – N.		AEF (100%)
	Coshocton 34.5 kV Circuit		
	and Coshocton – North		
	Coshocton 69 kV circuit		
	Rebuild existing West		
	Bellaire – Glencoe 69 kV		
1.2502	line with 138 kV & 69 kV		A FID (1000()
b2593	circuits and install 138/69		AEP (100%)
	kV transformer at Glencoe		
	Switch		
	Rebuild 1.0 mile of		
1.2704	Brantley – Bridge Street 69		A FID (1000())
b2594	kV Line with 1033 ACSR		AEP (100%)
	overhead conductor		
	Rebuild 7.82 mile Elkhorn		
	City – Haysi S.S 69 kV line		,
b2595.1	utilizing 1033 ACSR built		AEP (100%)
	to 138 kV standards		
	Rebuild 5.18 mile Moss –		
	Haysi SS 69 kV line		
b2595.2	utilizing 1033 ACSR built		AEP (100%)
	to 138 kV standards		
	Move load from the 34.5		
b2596	kV bus to the 138 kV bus		AED (1000/)
	by installing a new 138/12		AEP (100%)
	kV XF at New Carlisle		
	station in Indiana		

Rebuild approximately 1 mi. section of Dragoon Virgil Street 34.5 kV line between Dragoon and Dodge Tap switch and replace Dodge switch MOAB to increase thermal capability of Dragoon- Dodge Tap branch Rebuild approximately 1 mile section of the Kline- Virgil Street 34.5 kV line between Kline and Virgil Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  b2600 Rebuild Fremont — Pound line as 138 kV AEP (100%)  Fremont Station Improvements  Replace MOAB towards Beaver Creek with 138 kV breaker  Replace MOAB towards Clinch River with 138 kV breaker  Replace A as high side protection on transformer #1 Install two (2) circuit switchers on high side of transformers #2 and 3 at Fremont Station	Required Tr	ansmission Enhancements Annu	al Revenue Requirement	Responsible Customer(s)
Virgil Street 34.5 kV line     between Dragoon and     Dodge Tap switch and     replace Dodge switch     MOAB to increase thermal     capability of Dragoon-     Dodge Tap branch     Rebuild approximately 1     mile section of the Kline-     Virgil Street 34.5 kV line     between Kline and Virgil     Street tap. Replace MOAB     switches at Beiger, risers at     Kline, switches and bus at     Virgil Street     Virgil Street     Virgil Street     Rebuild approximately 0.1     miles of 69 kV line between     Albion and Albion tap     b2599     Beauld Fremont - Pound     line as 138 kV     AEP (100%)     b2601     Fremont Station     Improvements     Beaver Creek with 138 kV     b2601.1     Beaver Creek with 138 kV     b2601.2     Clinch River with 138 kV     b2601.3     Replace MOAB towards     b2601.3     Replace 138 kV Breaker A     with new bus-tie breaker     Re-use Breaker A as high     side protection on     transformer #1     Install two (2) circuit     switchers on high side of transformers # 2 and 3 at     AEP (100%)				
between Dragoon and Dodge Tap switch and replace Dodge switch MOAB to increase thermal capability of Dragoon-Dodge Tap branch Rebuild approximately I mile section of the Kline-Virgil Street 34.5 kV line between Kline and Virgil Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street tap. Replace MOAB switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  Bedoild approximately 0.1 miles of 69 kV line between Albion and Albion tap  Bedoild Fremont - Pound line as 138 kV  Bedoil Fremont Station Improvements  Replace MOAB towards  Beaver Creek with 138 kV  Beaver Replace MOAB towards  Clinch River with 138 kV  Breaker  Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at		mi. section of Dragoon-		
b2597 Dodge Tap switch and replace Dodge switch MOAB to increase thermal capability of Dragoon-Dodge Tap branch  Rebuild approximately 1 mile section of the Kline-Virgil Street 34.5 kV line between Kline and Virgil Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  B2690 Rebuild Fremont – Pound line as 138 kV  B2601 Fremont Station Improvements  Replace MOAB towards Beaver Creek with 138 kV breaker  Replace MOAB towards  B2601.2 Clinch River with 138 kV breaker  B2601.3 Replace IS8 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at		Virgil Street 34.5 kV line		
replace Dodge switch MOAB to increase thermal capability of Dragoon- Dodge Tap branch  Rebuild approximately 1 mile section of the Kline- Virgil Street 34.5 kV line between Kline and Virgil Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  b2600  Rebuild Fremont - Pound line as 138 kV  b2601  Fremont Station Improvements  Replace MOAB towards b2601.1  Replace MOAB towards b2601.2  Replace MOAB towards b2601.3  Replace MOAB towards b2601.3  Replace MOAB towards b2601.4  Replace MOAB towards b2601.5  Replace MOAB towards b2601.5  Replace MOAB towards b2601.6  Replace MOAB towards b2601.7  Replace MOAB towards b2601.8  Replace MOAB towards b2601.9  Replace MOAB towards b2601.0  Replace MOAB towards b2601.1  Replace MOAB towards b2601.2  Replace MOAB towards b2601.3  Replace MOAB towards b2601.4  Replace MOAB towards b2601.5  Replace MOAB towards b2601.6  Replace MOAB towards b2601.7  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)		between Dragoon and		
MOAB to increase thermal capability of Dragoon- Dodge Tap branch  Rebuild approximately 1 mile section of the Kline- Virgil Street 34.5 kV line between Kline and Virgil Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  B2600 Rebuild Fremont – Pound line as 138 kV AEP (100%)  B2601 Fremont Station Improvements  Replace MOAB towards Beaver Creek with 138 kV breaker  Replace MOAB towards  B2601.2 Replace MOAB towards  B2601.3 Replace MOAB towards  B2601.3 Replace MOAB towards  B2601.4 Replace MOAB towards  B2601.5 Replace MOAB towards  B2601.5 AEP (100%)  B2601.6 Replace MOAB towards  B2601.7 AEP (100%)  B2601.8 AEP (100%)  B2601.9 AEP (100%)  B2601.9 AEP (100%)  B2601.1 AEP (100%)  B2601.2 AEP (100%)  B2601.3 AEP (100%)  B2601.4 Side protection on transformer #1  B2601.5 Install two (2) circuit switchers on high side of transformers #2 and 3 at	b2597	Dodge Tap switch and		AEP (100%)
capability of Dragoon- Dodge Tap branch  Rebuild approximately 1 mile section of the Kline- Virgil Street 34.5 kV line between Kline and Virgil Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  Bebuild Fremont – Pound line as 138 kV  Beaver Creek with 138 k		replace Dodge switch		
Dodge Tap branch   Rebuild approximately 1   mile section of the Kline-Virgil Street 34.5 kV line   between Kline and Virgil Street tap. Replace MOAB   switches at Beiger, risers at Kline, switches and bus at Virgil Street.   Rebuild approximately 0.1   miles of 69 kV line between Albion and Albion tap   AEP (100%)				
Rebuild approximately 1 mile section of the Kline- Virgil Street 34.5 kV line between Kline and Virgil Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  Beauld Fremont – Pound line as 138 kV  Beauld Fremont Station Improvements  Replace MOAB towards Beaver Creek with 138 kV breaker  Replace MOAB towards Clinch River with 138 kV breaker  Beacon Moab towards Clinch River with 138 kV breaker  Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at		capability of Dragoon-		
mile section of the Kline-Virgil Street 34.5 kV line between Kline and Virgil Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  Bebuild Fremont – Pound line as 138 kV  Befold Fremont Station Improvements  Replace MOAB towards beaver Creek with 138 kV breaker  Replace MOAB towards  Befold: Replace MOAB towards  Beaver Creek with 138 kV AEP (100%)  Beaver Creek with 138 kV AEP (100%)  Replace MOAB towards  Beaver Beplace MOAB towards  Beaver Creek with 138 kV AEP (100%)  Beaver Replace MOAB towards  Beaver Creek with 138 kV AEP (100%)		Dodge Tap branch		
Virgil Street 34.5 kV line between Kline and Virgil Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  Bedould Fremont – Pound line as 138 kV  Beaver Creek with 138 kV  Breaker  Replace MOAB towards b2601.2  Replace MOAB towards Clinch River with 138 kV breaker  Beaver Creek with 138 kV breaker  Replace MOAB towards Clinch River with 138 kV breaker  Beaver Creek with 138 kV breaker  AEP (100%)		1 1		
between Kline and Virgil Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  Bedould Fremont – Pound line as 138 kV  Bedould Fremont Station Improvements  Replace MOAB towards Beaver Creek with 138 kV breaker  Replace MOAB towards Clinch River with 138 kV breaker  Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at		mile section of the Kline-		
Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  Bebuild Fremont – Pound line as 138 kV  Befold Fremont Station Improvements  Replace MOAB towards  Beaver Creek with 138 kV breaker  Replace MOAB towards  Clinch River with 138 kV breaker  Befold Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)		Virgil Street 34.5 kV line		
Street tap. Replace MOAB switches at Beiger, risers at Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  Rebuild Fremont – Pound line as 138 kV  B2601  Fremont Station Improvements  Replace MOAB towards Beaver Creek with 138 kV breaker  Replace MOAB towards Clinch River with 138 kV breaker  Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1 Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)	h2508			ΔED (100%)
Kline, switches and bus at Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  b2600 Rebuild Fremont – Pound line as 138 kV  b2601 Fremont Station Improvements  Replace MOAB towards b2601.1 Replace MOAB towards b2601.2 Clinch River with 138 kV breaker  b2601.3 Replace 138 kV Beaver Creek with 138 kV breaker  AEP (100%)	02376	Street tap. Replace MOAB		ALI (100%)
Virgil Street.  Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  Beauld Fremont – Pound line as 138 kV  Beauld Fremont Station Improvements  Replace MOAB towards Beaver Creek with 138 kV  Beauld Replace MOAB towards Clinch River with 138 kV  Beauld Replace MOAB towards  Clinch River with 138 kV  Beauld Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)  AEP (100%)  AEP (100%)				
Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap  b2600 Rebuild Fremont – Pound line as 138 kV  b2601 Fremont Station Improvements  Replace MOAB towards Beaver Creek with 138 kV breaker  Replace MOAB towards  Clinch River with 138 kV breaker  B2601.2 Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)		Kline, switches and bus at		
b2599 miles of 69 kV line between Albion and Albion tap  Bebuild Fremont – Pound line as 138 kV  B2601 Fremont Station Improvements  Replace MOAB towards Beaver Creek with 138 kV  b2601.1 Beaver MoAB towards Clinch River with 138 kV  b2601.2 Clinch River with 138 kV  breaker  Beplace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high b2601.4 Side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at		ŭ		
Albion and Albion tap  b2600 Rebuild Fremont – Pound line as 138 kV  b2601 Fremont Station Improvements  Replace MOAB towards b2601.1 Beaver Creek with 138 kV breaker  Replace MOAB towards b2601.2 Clinch River with 138 kV breaker  b2601.3 Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at		1 2		
b2600 Rebuild Fremont – Pound line as 138 kV  b2601 Fremont Station Improvements  Replace MOAB towards b2601.1 Beaver Creek with 138 kV breaker  Replace MOAB towards Clinch River with 138 kV breaker  b2601.2 Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at	b2599	miles of 69 kV line between		AEP (100%)
b2601 line as 138 kV  b2601 Fremont Station Improvements  Replace MOAB towards b2601.1 Beaver Creek with 138 kV breaker  Replace MOAB towards Clinch River with 138 kV breaker  Replace MOAB towards Clinch River with 138 kV breaker  AEP (100%)		Albion and Albion tap		
b2601 Fremont Station Improvements  Replace MOAB towards b2601.1 Beaver Creek with 138 kV breaker  Replace MOAB towards Clinch River with 138 kV breaker  Beaver Creek with 138 kV AEP (100%)	b2600			ΔED (100%)
Improvements   AEP (100%)	02000	line as 138 kV		ALI (100%)
Improvements  Replace MOAB towards Beaver Creek with 138 kV breaker  Replace MOAB towards Clinch River with 138 kV breaker  Beaver Creek with 138 kV breaker  Clinch River with 138 kV breaker  Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)	b2601	Fremont Station		ΔED (100%)
b2601.1 Beaver Creek with 138 kV breaker  Replace MOAB towards Clinch River with 138 kV breaker  b2601.2 Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)  AEP (100%)  AEP (100%)	02001	Improvements		ALI (100%)
breaker  Replace MOAB towards Clinch River with 138 kV breaker  b2601.3  Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)  AEP (100%)		<u> </u>		
Replace MOAB towards Clinch River with 138 kV breaker  b2601.3  Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  REP (100%)  AEP (100%)  AEP (100%)	b2601.1	Beaver Creek with 138 kV		AEP (100%)
b2601.2 Clinch River with 138 kV breaker  b2601.3 Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)  AEP (100%)				
breaker  b2601.3 Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high b2601.4 side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)  AEP (100%)		-		
b2601.3 Replace 138 kV Breaker A with new bus-tie breaker  Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)  AEP (100%)	b2601.2	Clinch River with 138 kV		AEP (100%)
b2601.3 with new bus-tie breaker  Re-use Breaker A as high b2601.4 side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)  AEP (100%)				
Re-use Breaker A as high side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)	b2601 3	Replace 138 kV Breaker A		ΔFP (100%)
b2601.4 side protection on transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)  AEP (100%)	02001.3	with new bus-tie breaker		ALI (10070)
transformer #1  Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)	b2601.4	_		
b2601.5 Install two (2) circuit switchers on high side of transformers # 2 and 3 at  AEP (100%)		<u> </u>		AEP (100%)
b2601.5 switchers on high side of transformers # 2 and 3 at  AEP (100%)		transformer #1		
transformers # 2 and 3 at		Install two (2) circuit		
transformers # 2 and 3 at	b2601.5	switchers on high side of		AED (100%)
Fremont Station				ALI (100%)
		Fremont Station		

Required 11	ansmission Enhancements Annu	iai Revenue Requirement	Responsible Customer(s)
b2602.1	Install 138 kV breaker E2 at		AEP (100%)
	North Proctorville		<u> </u>
b2602.2	Construct 2.5 Miles of 138 kV 1033 ACSR from East Huntington to Darrah 138		AEP (100%)
	kV substations		
	Install breaker on new line		
b2602.3	exit at Darrah towards East		AEP (100%)
	Huntington		( )
	Install 138 kV breaker on		
b2602.4	new line at East Huntington		AEP (100%)
	towards Darrah		
1.2602.5	Install 138 kV breaker at		A ED (1000()
b2602.5	East Huntington towards North Proctorville		AEP (100%)
	North Proctorville		
b2603	Boone Area Improvements		AEP (100%)
	Purchase approximately a		
b2603.1	200X300 station site near		AEP (100%)
	Slaughter Creek 46 kV		(/
	station (Wilbur Station)		
1.2602.2	Install 3 138 kV circuit		A ED (1000()
b2603.2	breakers, Cabin Creek to Hernshaw 138 kV circuit		AEP (100%)
	Construct 1 mi. of double		
	circuit 138 kV line on		
	Wilbur – Boone 46 kV line		
b2603.3	with 1590 ACSS 54/19		AED (1000/)
	conductor @ 482 Degree		AEP (100%)
	design temp. and 1-159 12/7		
	ACSR and one 86 Sq.MM.		
	0.646" OPGW Static wires		
b2604	Bellefonte Transformer		AEP (100%)
	Addition		. ,

Required 11	ansmission Ennancements Annu	iai Revenue Requirement	Responsible Customer(s)
	Rebuild and reconductor		
	Kammer – George		
	Washington 69 kV circuit		
1.250.5	and George Washington –		A FID (1000())
b2605	Moundsville ckt #1,		AEP (100%)
	designed for 138kV.		
	Upgrade limiting equipment		
	at remote ends and at tap		
	stations		
1-2000	Convert Bane –		AED (1000/)
b2606	Hammondsville from 23 kV		AEP (100%)
	to 69 kV operation		
b2607	Pine Gap Relay Limit		AEP (100%)
	Increase		
b2608	Richlands Relay Upgrade		AEP (100%)
	Thorofare – Goff Run –		
b2609	Powell Mountain 138 kV		AEP (100%)
02007	Build		ALI (10070)
1.0.410	Rebuild Pax Branch –		177 (100)
b2610	Scaraboro as 138 kV		AEP (100%)
k2611	Skin Fork Area		AED (1000/)
b2611	Improvements		AEP (100%)
	New 138/46 kV station near		
b2611.1	Skin Fork and other		AEP (100%)
	components		
	Construct 3.2 miles of 1033		
	ACSR double circuit from		
b2611.2	new Station to cut into		AEP (100%)
	Sundial-Baileysville 138 kV		
	line		
b2634.1	Replace metering BCT on		
	Tanners Creek CB T2 with		
	a slip over CT with higher		
	thermal rating in order to		AEP (100%)
	remove 1193 MVA limit on		
	facility (Miami Fort-		
	Tanners Creek 345 kV line)		

required 11	ansinission Emiancements Anni	iai Kevenue Requirement	Responsible Customer(s)
b2643	Replace the Darrah 138 kV breaker 'L' with 40kA rated breaker		AEP (100%)
b2645	Ohio Central 138 kV Loop		AEP (100%)
b2667	Replace the Muskingum 138 kV bus # 1 and 2		AEP (100%)
b2668	Reconductor Dequine to Meadow Lake 345 kV circuit #1 utilizing dual 954 ACSR 54/7 cardinal conductor		AEP (100%)
b2669	Install a second 345/138 kV transformer at Desoto		AEP (100%)
b2670	Replace switch at Elk Garden 138 kV substation (on the Elk Garden – Lebanon 138 kV circuit)		AEP (100%)
b2671	Replace/upgrade/add terminal equipment at Bradley, Mullensville, Pinnacle Creek, Itmann, and Tams Mountain 138 kV substations. Sag study on Mullens – Wyoming and Mullens – Tams Mt. 138 kV circuits		AEP (100%)

required 11	ansinission Emiancements Ami	uai Kevenue Kequitement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
			DEOK (3.23%) / DL (1.73%) /
	Install a +/- 450 MVAR SVC at Jacksons Ferry 765 kV substation		DPL (2.65%) / Dominion
L2697 1			(13.03%) / EKPC (1.77%) /
b2687.1			JCPL (3.84%) / ME (1.93%) /
			NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			AEP (100%)

<sup>\*</sup>Neptune Regional Transmission System, LLC

required 11	ansmission Enhancements Annu	iai Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%) /
			APS (5.61%) / ATSI (8.10%) /
			BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
	Install a 300 MVAR shunt		DEOK (3.23%) / DL (1.73%) /
	line reactor on the		DPL (2.65%) / Dominion
b2687.2	Broadford end of the		(13.03%) / EKPC (1.77%) /
02087.2	Broadford – Jacksons Ferry		JCPL (3.84%) / ME (1.93%) /
	765 kV line		NEPTUNE* (0.45%) / OVEC
	703 KV IIIIE		(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			AEP (100%)
	Mitigate violations		
	identified by sag study to		
	operate Fieldale-Thornton-		
b2697.1	Franklin 138 kV overhead		AEP (100%)
02097.1	line conductor at its max.		ALI (100%)
	operating temperature. 6		
	potential line crossings to		
	be addressed.		
	Replace terminal equipment		
	at AEP's Danville and East		
b2697.2	Danville substations to		AEP (100%)
	improve thermal capacity of		AEF (100%)
	Danville – East Danville		
	138 kV circuit		

<sup>\*</sup>Neptune Regional Transmission System, LLC

Replace relays at AEP's Cloverdale and Jackson's Ferry substations to improve the thermal capacity of Cloverdale – Jackson's Ferry 765 kV line  Construct Herlan station as breaker and a half configuration with 9-138 kV CB's on 4 strings and with 2-28.8 MVAR capacitor banks  Construct new 138 kV line from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station	Required 11	ansmission Ennancements Annua	ai Revenue Requirement	Responsible Customer(s)
Ferry substations to improve the thermal capacity of Cloverdale – Jackson's Ferry 765 kV line  Construct Herlan station as breaker and a half configuration with 9-138 kV CB's on 4 strings and with 2-28.8 MVAR capacitor banks  Construct new 138 kV line from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station				
the thermal capacity of Cloverdale – Jackson's Ferry 765 kV line  Construct Herlan station as breaker and a half configuration with 9-138 kV CB's on 4 strings and with 2-28.8 MVAR capacitor banks  Construct new 138 kV line from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station				
the thermal capacity of Cloverdale – Jackson's Ferry 765 kV line  Construct Herlan station as breaker and a half configuration with 9-138 kV CB's on 4 strings and with 2- 28.8 MVAR capacitor banks  Construct new 138 kV line from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station	b2698	•		AFP (100%)
Total Republic Properties of 34.5 kV line  Total Republic Properties of 34.5 kV line  Total Republic Properties of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  Total Republic Properties of 12.5 kV line strains of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  Total Republic Properties of 12.00% (AEP (100%))  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)	02070			ALI (10070)
Construct Herlan station as breaker and a half configuration with 9-138 kV CB's on 4 strings and with 2-28.8 MVAR capacitor banks  Construct new 138 kV line from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  Construct Herlan station as breaker and a half (100%)  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)		Cloverdale – Jackson's Ferry		
breaker and a half configuration with 9-138 kV CB's on 4 strings and with 2- 28.8 MVAR capacitor banks  Construct new 138 kV line from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station				
b2701.1 configuration with 9-138 kV CB's on 4 strings and with 2- 28.8 MVAR capacitor banks  Construct new 138 kV line from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station		Construct Herlan station as		
CB's on 4 strings and with 2- 28.8 MVAR capacitor banks  Construct new 138 kV line from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)  AEP (100%)		breaker and a half		
28.8 MVAR capacitor banks  Construct new 138 kV line from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234    ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)  AEP (100%)	b2701.1	configuration with 9-138 kV		AEP (100%)
Construct new 138 kV line from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234    ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)  AEP (100%)		CB's on 4 strings and with 2-		
from Herlan station to Blue Racer station. Estimated approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)  AEP (100%)		28.8 MVAR capacitor banks		
B2701.2 Racer station. Estimated approx. 3.2 miles of 1234    ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)  AEP (100%)		Construct new 138 kV line		
approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)  AEP (100%)		from Herlan station to Blue		
approx. 3.2 miles of 1234 ACSS/TW Yukon and OPGW  Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)	b2701.2	Racer station. Estimated		AED (100%)
OPGW Install 1-138 kV CB at Blue 2701.3 Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)	02/01.2	approx. 3.2 miles of 1234		AEF (100%)
Install 1-138 kV CB at Blue Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)		ACSS/TW Yukon and		
2701.3 Racer to terminate new Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)		OPGW		
Herlan circuit  Rebuild/upgrade line between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)		Install 1-138 kV CB at Blue		
Rebuild/upgrade line b2714 between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)	2701.3	Racer to terminate new		AEP (100%)
b2714 between Glencoe and Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)  AEP (100%)		Herlan circuit		
Willow Grove Switch 69 kV  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)		Rebuild/upgrade line		
b2715  Build approximately 11.5 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)	b2714	between Glencoe and		AEP (100%)
b2715 miles of 34.5 kV line with 556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)		Willow Grove Switch 69 kV		
b2715  556.5 ACSR 26/7 Dove conductor on wood poles from Flushing station to Smyrna station  AEP (100%)		Build approximately 11.5		
conductor on wood poles from Flushing station to Smyrna station  AEP (100%)		miles of 34.5 kV line with		
from Flushing station to Smyrna station	b2715	556.5 ACSR 26/7 Dove		AED (1000/)
Smyrna station	02/13	conductor on wood poles		AEF (100%)
		from Flushing station to		
		Smyrna station		
Replace the South Canton		Replace the South Canton		
b2727 138 kV breakers 'K', 'J', AEP (100%)	h2727	138 kV breakers 'K', 'J',		AED (1000/)
b2727 'J1', and 'J2' with 80kA AEP (100%)	02/2/	'J1', and 'J2' with 80kA		AEF (100%)
breakers		breakers		

required 11	ansimission Emiancements Amina	ai Kevenue Kequitement	Responsible Customer(s)
	Convert the Sunnyside – East Sparta – Malvern 23 kV		
b2731	sub-transmission network to		AEP (100%)
	69 kV. The lines are already		
	built to 69 kV standards		
	Replace South Canton 138		
b2733	kV breakers 'L' and 'L2'		AEP (100%)
	with 80 kA rated breakers		
	Retire Betsy Layne		
	138/69/43 kV station and		
b2750.1	replace it with the greenfield		AEP (100%)
02750.1	Stanville station about a half		1121 (100,0)
	mile north of the existing		
	Betsy Layne station		
	Relocate the Betsy Layne		
b2750.2	capacitor bank to the Stanville 69 kV bus and		AED (1000/)
02/30.2	increase the size to 14.4		AEP (100%)
	MVAR		
	Replace existing George		
	Washington station 138 kV		
	yard with GIS 138 kV		
	breaker and a half yard in		177 (100)
b2753.1	existing station footprint.		AEP (100%)
	Install 138 kV revenue		
	metering for new IPP		
	connection		
	Replace Dilles Bottom 69/4		
b2753.2	kV Distribution station as		
	breaker and a half 138 kV		
	yard design including AEP		AEP (100%)
02133.2	Distribution facilities but		71L1 (100/0)
	initial configuration will		
	constitute a 3 breaker ring		
	bus		

Connect two 138 kV 6-wired circuits from "Point A" (currently de-energized and owned by FirstEnergy) in circuit positions previously designated Burger #1 & Burger #2 138 kV. Install interconnection settlement metering on both circuits exiting Holloway  Build double circuit 138 kV line from Dilles Bottom to "Point A". Tie each new AEP circuit in with a 6-wired line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom — 69 kV lines) south of FirstEnergy 138 kV line  b2753.7	Required 11		ai Revenue Requirement	Responsible Customer(s)
(currently de-energized and owned by FirstEnergy) in circuit positions previously designated Burger #1 & Burger #2 138 kV. Install interconnection settlement metering on both circuits exiting Holloway  Build double circuit 138 kV line from Dilles Bottom to "Point A". Tie each new AEP circuit in with a 6-wired line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom — 69 kV lines) south of FirstEnergy 138 kV line  b2753.7 FirstEnergy 138 kV line  AEP (100%)				
owned by FirstEnergy) in circuit positions previously designated Burger #1 & Burger #2 138 kV. Install interconnection settlement metering on both circuits exiting Holloway  Build double circuit 138 kV line from Dilles Bottom to "Point A". Tie each new AEP circuit in with a 6-wired line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom — 69 kV lines) south of FirstEnergy 138 kV line  b2753.7 FirstEnergy 138 kV line  AEP (100%)				
b2753.3 circuit positions previously designated Burger #1 & Burger #2 138 kV. Install interconnection settlement metering on both circuits exiting Holloway  Build double circuit 138 kV line from Dilles Bottom to "Point A". Tie each new AEP circuit in with a 6-wired line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom — 69 kV lines) south of FirstEnergy 138 kV line  b2753.7 FirstEnergy 138 kV line  AEP (100%)		` _		
designated Burger #1 & Burger #2 138 kV. Install interconnection settlement metering on both circuits exiting Holloway  Build double circuit 138 kV line from Dilles Bottom to "Point A". Tie each new AEP circuit in with a 6-wired line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AEP (100%)				
designated Burger #1 & Burger #2 138 kV. Install interconnection settlement metering on both circuits exiting Holloway  Build double circuit 138 kV line from Dilles Bottom to "Point A". Tie each new AEP circuit in with a 6-wired line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AEP (100%)	b2753.3			AEP (100%)
interconnection settlement metering on both circuits exiting Holloway  Build double circuit 138 kV line from Dilles Bottom to "Point A". Tie each new AEP circuit in with a 6-wired line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AEP (100%)	02733.3	_		1121 (10070)
metering on both circuits exiting Holloway  Build double circuit 138 kV line from Dilles Bottom to "Point A". Tie each new AEP circuit in with a 6-wired line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AEP (100%)		_		
exiting Holloway  Build double circuit 138 kV line from Dilles Bottom to "Point A". Tie each new AEP circuit in with a 6-wired line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AEP (100%)				
Build double circuit 138 kV line from Dilles Bottom to  "Point A". Tie each new AEP circuit in with a 6-wired b2753.6 line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AEP (100%)		_		
line from Dilles Bottom to "Point A". Tie each new AEP circuit in with a 6-wired line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AEP (100%)		· ·		
"Point A". Tie each new AEP circuit in with a 6-wired b2753.6 line at Point A. This will create a Dilles Bottom – Holloway 138 kV circuit and a George Washington – Holloway 138 kV circuit  Retire line sections (Dilles Bottom – Bellaire and Moundsville – Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AEP (100%)				
AEP circuit in with a 6-wired line at Point A. This will create a Dilles Bottom – Holloway 138 kV circuit and a George Washington – Holloway 138 kV circuit  Retire line sections (Dilles Bottom – Bellaire and Moundsville – Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AEP (100%)				
b2753.6 line at Point A. This will create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AEP (100%)				
create a Dilles Bottom — Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AFP (100%)		AEP circuit in with a 6-wired		
Holloway 138 kV circuit and a George Washington — Holloway 138 kV circuit  Retire line sections (Dilles Bottom — Bellaire and Moundsville — Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AFP (100%)	b2753.6			AEP (100%)
a George Washington – Holloway 138 kV circuit  Retire line sections (Dilles Bottom – Bellaire and Moundsville – Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AFP (100%)		create a Dilles Bottom –		
Holloway 138 kV circuit  Retire line sections (Dilles Bottom – Bellaire and Moundsville – Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AFP (100%)		Holloway 138 kV circuit and		
Retire line sections (Dilles Bottom – Bellaire and Moundsville – Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AFP (100%)		a George Washington –		
Bottom – Bellaire and Moundsville – Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line  AFP (100%)		Holloway 138 kV circuit		
Moundsville – Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line AFP (100%)		Retire line sections (Dilles		
69 kV lines) south of FirstEnergy 138 kV line		Bottom – Bellaire and		
b2753.7 FirstEnergy 138 kV line AFP (100%)		Moundsville – Dilles Bottom		
D//33 /   AFP(1110%)		69 kV lines) south of		
$\begin{bmatrix} 02/33.7 & & & & & & & & & & & & & & & & & & &$	b2753.7	FirstEnergy 138 kV line		ΛED (100%)
corridor, near "Point A". He	02733.7	corridor, near "Point A". Tie		ALI (100%)
George Washington –		George Washington –		
Moundsville 69 kV circuit to		Moundsville 69 kV circuit to		
George Washington – West		George Washington – West		
Bellaire 69 kV circuit		Bellaire 69 kV circuit		
Rebuild existing 69 kV line		Rebuild existing 69 kV line		
as double circuit from	10752 O	as double circuit from		
George Washington – Dilles		George Washington – Dilles		
b2753.8 Bottom 138 kV. One circuit AEP (100%)		Bottom 138 kV. One circuit		AED (1000/ \
b2753.8 will cut into Dilles Bottom AEP (100%)	02/33.8	will cut into Dilles Bottom		AEF (100%)
138 kV initially and the other		138 kV initially and the other		
will go past with future plans		will go past with future plans		
to cut in				

Required 11		Revenue Requirement	Responsible Customer(s)
b2760	Perform a Sag Study of the Saltville – Tazewell 138 kV line to increase the thermal rating of the line		AEP (100%)
b2761.1	Replace the Hazard 161/138 kV transformer		AEP (100%)
b2761.2	Perform a Sag Study of the Hazard – Wooten 161 kV line to increase the thermal rating of the line		AEP (100%)
b2761.3	Rebuild the Hazard – Wooton 161 kV line utilizing 795 26/7 ACSR conductor (300 MVA rating)		AEP (100%)
b2762	Perform a Sag Study of Nagel  - West Kingsport 138 kV line to increase the thermal rating of the line		AEP (100%)
b2776	Reconductor the entire Dequine – Meadow Lake 345 kV circuit #2		AEP (100%)
b2777	Reconductor the entire Dequine – Eugene 345 kV circuit #1		EKPC (100%)
b2779.1	Construct a new 138 kV station, Campbell Road, tapping into the Grabill – South Hicksville138 kV line		AEP (100%)
b2779.2	Reconstruct sections of the Butler-N.Hicksville and Auburn-Butler 69 kV circuits as 138 kV double circuit and extend 138 kV from Campbell Road station		AEP (100%)

required Ti	ansimission Emiancements Amitual	i Kevenue Requirement	Responsible Cusiomer(s)
b2779.3	Construct a new 345/138 kV SDI Wilmington Station which will be sourced from Collingwood 345 kV and serve the SDI load at 345 kV and 138 kV, respectively		AEP (100%)
b2779.4	Loop 138 kV circuits in-out of the new SDI Wilmington 138 kV station resulting in a direct circuit to Auburn 138 kV and an indirect circuit to Auburn and Rob Park via Dunton Lake, and a circuit to Campbell Road; Reconductor 138 kV line section between Dunton Lake – SDI Wilmington		AEP (100%)
b2779.5	Expand Auburn 138 kV bus		AEP (100%)
b2787	Reconductor 0.53 miles (14 spans) of the Kaiser Jct Air Force Jct. Sw section of the Kaiser - Heath 69 kV circuit/line with 336 ACSR to match the rest of the circuit (73 MVA rating, 78% loading)		AEP (100%)
b2788	Install a new 3-way 69 kV line switch to provide service to AEP's Barnesville distribution station. Remove a portion of the #1 copper T- Line from the 69 kV through- path		AEP (100%)

required 11	ansinission Emiancements	Ailliuai Revenue Requirei	hent Responsible Customer(s)
b2789	Rebuild the Brues - Glendale Heights 69 kV line section (5 miles) with 795 ACSR (128		AEP (100%)
	MVA rating, 43% loading)		
	Install a 3 MVAR, 34.5 kV		
b2790	cap bank at Caldwell		AEP (100%)
	substation		,
1.0=0.1	Rebuild Tiffin – Howard, new		177 (1001)
b2791	transformer at Chatfield		AEP (100%)
	Rebuild portions of the East		
	Tiffin - Howard 69 kV line		
	from East Tiffin to West		
b2791.1	Rockaway Switch (0.8 miles)		AEP (100%)
	using 795 ACSR Drake		,
	conductor (129 MVA rating,		
	50% loading)		
	Rebuild Tiffin - Howard 69		
	kV line from St. Stephen's		
	Switch to Hinesville (14.7		
b2791.2	miles) using 795 ACSR		AEP (100%)
	Drake conductor (90 MVA		
	rating, non-conductor limited,		
	38% loading)		
	New 138/69 kV transformer		
b2791.3	with 138/69 kV protection at		AEP (100%)
	Chatfield		
b2791.4	New 138/69 kV protection at		AEP (100%)
02771.4	existing Chatfield transformer		ALI (100%)
	Replace the Elliott		
	transformer with a 130 MVA		
	unit, reconductor 0.42 miles		
	of the Elliott – Ohio		
b2792	University 69 kV line with		AEP (100%)
02172	556 ACSR to match the rest		71L1 (10070)
	of the line conductor (102		
	MVA rating, 73% loading)		
	and rebuild 4 miles of the		
	Clark Street – Strouds R		

110000111		initial revenue requirement responsible eustomer(s)
b2793	Energize the spare Fremont Center 138/69 kV 130 MVA transformer #3. Reduces overloaded facilities to 46% loading	AEP (100%)
b2794	Construct new 138/69/34 kV station and 1-34 kV circuit (designed for 69 kV) from new station to Decliff station, approximately 4 miles, with 556 ACSR conductor (51 MVA rating)	AEP (100%)
b2795	Install a 34.5 kV 4.8 MVAR capacitor bank at Killbuck 34.5 kV station	AEP (100%)
b2796	Rebuild the Malvern - Oneida Switch 69 kV line section with 795 ACSR (1.8 miles, 125 MVA rating, 55% loading)	AEP (100%)
b2797	Rebuild the Ohio Central - Conesville 69 kV line section (11.8 miles) with 795 ACSR conductor (128 MVA rating, 57% loading). Replace the 50 MVA Ohio Central 138/69 kV XFMR with a 90 MVA unit	AEP (100%)
b2798	Install a 14.4 MVAR capacitor bank at West Hicksville station. Replace ground switch/MOAB at West Hicksville with a circuit switcher	AEP (100%)
b2799	Rebuild Valley - Almena, Almena - Hartford, Riverside - South Haven 69 kV lines. New line exit at Valley Station. New transformers at Almena and Hartford	AEP (100%)

Required 11	ansmission Enhancements	Ailluai Revenue Requirei	ment Responsible Customer(s)
	Rebuild 12 miles of Valley –		
	Almena 69 kV line as a		
	double circuit 138/69 kV line		
b2799.1	using 795 ACSR conductor		AEP (100%)
02777.1	(360 MVA rating) to		ALI (100%)
	introduce a new 138 kV		
	source into the 69 kV load		
	pocket around Almena station		
	Rebuild 3.2 miles of Almena		
b2799.2	to Hartford 69 kV line using		AEP (100%)
02177.2	795 ACSR conductor (90		ALI (100%)
	MVA rating)		
	Rebuild 3.8 miles of		
b2799.3	Riverside – South Haven 69		AEP (100%)
02177.3	kV line using 795 ACSR		71E1 (10070)
	conductor (90 MVA rating)		
	At Valley station, add new		
	138 kV line exit with a 3000		
b2799.4	A 40 kA breaker for the new		AEP (100%)
02777.4	138 kV line to Almena and		71L1 (10070)
	replace CB D with a 3000 A		
	40 kA breaker		
	At Almena station, install a		
	90 MVA 138/69 kV		
b2799.5	transformer with low side		AEP (100%)
02177.5	3000 A 40 kA breaker and		71L1 (10070)
	establish a new 138 kV line		
	exit towards Valley		
	At Hartford station, install a		
	second 90 MVA 138/69 kV		
b2799.6	transformer with a circuit		AEP (100%)
	switcher and 3000 A 40 kA		
	low side breaker		

Required Transmission Educations		Annual Revenue Requirement Responsible Customer(s)	
b2817	Replace Delaware 138 kV breaker 'P' with a 40 kA		AEP (100%)
	breaker		(,
	Replace West Huntington 138		
b2818	kV breaker 'F' with a 40 kA		AEP (100%)
	breaker		
1.010	Replace Madison 138 kV		177 (100.1)
b2819	breaker 'V' with a 63 kA		AEP (100%)
	breaker		
1,2020	Replace Sterling 138 kV		AED (1000/)
b2820	breaker 'G' with a 40 kA breaker		AEP (100%)
	Replace Morse 138 kV breakers '103', '104', '105',		
b2821	and '106' with 63 kA		AEP (100%)
	breakers		
	Replace Clinton 138 kV		
b2822	breakers '105' and '107' with		AEP (100%)
	63 kA breakers		
	Install 300 MVAR reactor at		
b2826.1	Ohio Central 345 kV		AEP (100%)
	substation		

Required 11	ansmission Ennancements Annual	Revenue Requirement	Responsible Customer(s)
b2826.2	Install 300 MVAR reactor at West Bellaire 345 kV		AEP (100%)
	substation		, ,
	Upgrade the Tanner Creek –		DFAX Allocation:
b2831.1	Miami Fort 345 kV circuit		Dayton (61.71%) / DEOK
	(AEP portion)		(37.68%) / OVEC (0.61%)
	Six wire the Kyger Creek –		
b2832	Sporn 345 kV circuits #1 and		AEP (100%)
02032	#2 and convert them to one		AEF (100%)
	circuit		
	Reconductor the Maddox		DFAX Allocation:
b2833	Creek – East Lima 345 kV		AEP (80.83%) / Dayton (18.73%)
02033	circuit with 2-954 ACSS		/ OVEC (0.44%)
	Cardinal conductor		, 0, 20 (01170)
	Reconductor and string open		
b2834	position and sixwire 6.2 miles		AEP (100%)
	of the Chemical – Capitol Hill		` ,
	138 kV circuit		
1 0070	Replace the South Canton 138		AED (1000/)
b2872	kV breaker 'K2' with a 80 kA		AEP (100%)
	breaker  Deple so the Couth Conton 129		
b2873	Replace the South Canton 138 kV breaker "M" with a 80 kA		AED (1000/)
02073	breaker		AEP (100%)
	Replace the South Canton 138		
b2874	kV breaker "M2" with a 80		AEP (100%)
02074	kA breaker		ALI (100%)
	Upgrade the Clifty Creek		
b2878	345 kV risers		AEP (100%)
	Rebuild approximately 4.77		
	miles of the Cannonsburg –		
b2880	South Neal 69 kV line section		AEP (100%)
	utilizing 795 ACSR		(100/0)
	conductor (90 MVA rating)		

Required 11	ansinission Emancements	Ailiuai Revenue Requirent	ent Responsible Customer(s)
	Rebuild ~1.7 miles of the		
	Dunn Hollow – London 46		
b2881	kV line section utilizing 795		AEP (100%)
02001	26/7 ACSR conductor (58		71L1 (10070)
	MVA rating, non-conductor		
	limited)		
	Rebuild Reusens - Peakland		
b2882	Switch 69 kV line. Replace		AEP (100%)
	Peakland Switch		
	Rebuild the Reusens -		
	Peakland Switch 69 kV line		
b2882.1	(approximately 0.8 miles)		AEP (100%)
02002.1	utilizing 795 ACSR		AEF (100%)
	conductor (86 MVA rating,		
	non-conductor limited)		
	Replace existing Peakland S.S		
b2882.2	with new 3 way switch phase		AEP (100%)
	over phase structure		
	Rebuild the Craneco – Pardee		
	- Three Forks - Skin Fork 46		
b2883	kV line section		AEP (100%)
02883	(approximately 7.2 miles)		AEI (100%)
	utilizing 795 26/7 ACSR		
	conductor (108 MVA rating)		
	Install a second transformer at		
	Nagel station, comprised of 3		
	single phase 250 MVA		
	500/138 kV transformers.		
1-2004	Presently, TVA operates their		AED (1000()
b2884	end of the Boone Dam –		AEP (100%)
	Holston 138 kV		
	interconnection as normally		
	open preemptively for the loss		
	of the existing Nagel		
1-2005	New delivery point for City		A E.D. (1000/.)
b2885	of Jackson		AEP (100%)

Required 11	ansmission Ennancements	Allitual Revenue Require	ement Responsible Customer(s)
	Install a new Ironman Switch		
	to serve a new delivery point		
b2885.1	requested by the City of		AEP (100%)
	Jackson for a load increase		
	request		
	Install a new 138/69 kV		
	station (Rhodes) to serve as a		
b2885.2	third source to the area to help		AEP (100%)
	relieve overloads caused by		
	the customer load increase		
	Replace Coalton Switch with		
b2885.3	a new three breaker ring bus		AEP (100%)
	(Heppner)		
	Install 90 MVA 138/69 kV		
	transformer, new transformer		
b2886	high and low side 3000 A 40		AEP (100%)
02000	kA CBs, and a 138 kV 40 kA		ALF (100%)
	bus tie breaker at West End		
	Fostoria		
	Add 2-138 kV CB's and		
	relocate 2-138 kV circuit exits		
b2887	to different bays at Morse		AEP (100%)
02887	Road. Eliminate 3 terminal		AEI (100%)
	line by terminating Genoa -		
	Morse circuit at Morse Road		
	Retire Poston substation.		
b2888	Install new Lemaster		AEP (100%)
	substation		
b2888.1	Remove and retire the Poston		AED (1000/)
02000.1	138 kV station		AEP (100%)
	Install a new greenfield		
b2888.2	station, Lemaster 138 kV		AEP (100%)
	Station, in the clear		

Required 113	ansmission Ennancements	Annual Revenue Requiremen	it Responsible Customer(s)
b2888.3	Relocate the Trimble 69 kV AEP Ohio radial delivery point to 138 kV, to be served off of the Poston – Strouds Run – Crooksville 138 kV circuit via a new three-way switch. Retire the Poston -		AEP (100%)
b2889	Trimble 69 kV line Expand Cliffview station		AEP (100%)
b2889.1	Cliffview Station: Establish 138 kV bus. Install two 138/69 kV XFRs (130 MVA), six 138 kV CBs (40 kA 3000 A) and four 69 kV CBs (40 kA 3000 A)		AEP (100%)
b2889.2	Byllesby – Wythe 69 kV: Retire all 13.77 miles (1/0 CU) of this circuit (~4 miles currently in national forest)		AEP (100%)
b2889.3	Galax – Wythe 69 kV: Retire 13.53 miles (1/0 CU section) of line from Lee Highway down to Byllesby. This section is currently double circuited with Byllesby – Wythe 69 kV. Terminate the southern 3/0 ACSR section into the newly opened position at Byllesby		AEP (100%)
b2889.4	Cliffview Line: Tap the existing Pipers Gap – Jubal Early 138 kV line section. Construct double circuit in/out (~2 miles) to newly established 138 kV bus, utilizing 795 26/7 ACSR conductor		AEP (100%)

Required 11	ansimission Emiancements	Aimuai Nevenue Nequilen	Henr Responsible Customer(s)
	Rebuild 23.55 miles of the		
	East Cambridge – Smyrna		
b2890.1	34.5 kV circuit with 795		AEP (100%)
	ACSR conductor (128 MVA		
	rating) and convert to 69 kV		
	East Cambridge: Install a		
	2000 A 69 kV 40 kA circuit		
b2890.2	breaker for the East		AEP (100%)
	Cambridge – Smyrna 69 kV		
	circuit		
	Old Washington: Install 69		
b2890.3	kV 2000 A two way phase		AEP (100%)
	over phase switch		
b2890.4	Install 69 kV 2000 A two way		AEP (100%)
02070.4	phase over phase switch		ALI (100%)
	Rebuild the Midland Switch		
	to East Findlay 34.5 kV line		
b2891	(3.31 miles) with 795 ACSR		AEP (100%)
	(63 MVA rating) to match		
	other conductor in the area		
	Install new 138/12 kV		
	transformer with high side		
	circuit switcher at Leon and a		
	new 138 kV line exit towards		
b2892	Ripley. Establish 138 kV at		AED (1000/)
02892	the Ripley station with a new		AEP (100%)
	138/69 kV 130 MVA		
	transformer and move the		
	distribution load to 138 kV		
	service		
	Rebuild approximately 6.7		
	miles of 69 kV line between		
	Mottville and Pigeon River		
b2936.1	using 795 ACSR conductor		AED (100%)
02930.1	(129 MVA rating). New		AEP (100%)
	construction will be designed		
	to 138 kV standards but		
	operated at 69 kV		
· · · · · · · · · · · · · · · · · · ·			

Required 11	ansmission Ennancements	Allitual Revenue Requiren	nent Responsible Customer(s)
	Pigeon River Station: Replace		
	existing MOAB Sw. 'W' with		
	a new 69 kV 3000 A 40 kA		
b2936.2	breaker, and upgrade existing		AEP (100%)
	relays towards HMD station.		
	Replace CB H with a 3000 A		
	40 kA breaker		
	Replace the existing 636		
b2937	ACSR 138 kV bus at		AEP (100%)
02337	Fletchers Ridge with a larger		ALI (10070)
	954 ACSR conductor		
	Perform a sag mitigations on		
	the Broadford – Wolf Hills		
b2938	138 kV circuit to allow the		AEP (100%)
	line to operate to a higher		
	maximum temperature		
	Cut George Washington –		
b2958.1	Tidd 138 kV circuit into Sand		AEP (100%)
02730.1	Hill and reconfigure Brues &		ALF (100%)
	Warton Hill line entrances		
	Add 2 138 kV 3000 A 40 kA		
b2958.2	breakers, disconnect switches,		AEP (100%)
02730.2	and update relaying at Sand		ALF (100%)
	Hill station		
	Upgrade existing 345 kV		
b2968	terminal equipment at Tanner		AEP (100%)
	Creek station		
	Replace terminal equipment		
b2969	on Maddox Creek - East		AEP (100%)
	Lima 345 kV circuit		
	Upgrade terminal equipment		
	at Tanners Creek 345 kV		
b2976	station. Upgrade 345 kV bus		AEP (100%)
	and risers at Tanners Creek		
	for the Dearborn circuit		
L			

		1	ement Responsible Customer(s)
	Replace the Twin Branch 345 kV breaker "JM" with 63 kA		
b2988	breaker and associated		AEP (100%)
	substation works including		(,
	switches, bus leads, control		
	cable and new DICM		
	Rebuild the Torrey – South		
	Gambrinus Switch –		
b2993	Gambrinus Road 69 kV line		AEP (100%)
02))3	section (1.3 miles) with 1033		1121 (10070)
	ACSR 'Curlew' conductor		
	and steel poles		
	Replace South Canton 138 kV		
b3000	breaker 'N' with an 80kA		AEP (100%)
	breaker		
	Replace South Canton 138 kV		
b3001	breaker 'N1' with an 80kA		AEP (100%)
	breaker		
	Replace South Canton 138 kV		
b3002	breaker 'N2' with an 80kA		AEP (100%)
	breaker		
	Rebuild 15.6 miles of		
b3036	Haviland - North Delphos 138		AEP (100%)
	kV line		
h2027	Upgrades at the Natrium		AED (1000/)
b3037	substation		AEP (100%)
1 2020	Reconductor the Capitol Hill		AED (1000()
b3038	- Coco 138 kV line section		AEP (100%)
b3039	Line swaps at Muskingum		A ED /1000/
	138 kV station		AEP (100%)
	Rebuild Ravenswood –		
	Racine tap 69 kV line section		
b3040.1	(~15 miles) to 69 kV		AEP (100%)
	standards, utilizing 795 26/7		(100,0)
	ACSR conductor		
	11CDIC COlluctor		

Rebuild existing Ripley -	Required 11	ansmission Enhancements	Annual Revenue Requireme	nt Responsible Customer(s)
b3040.2 (~9 miles) to 69 kV standards, utilizing 795 26/7 ACSR conductor  Install new 3-way phase over phase switch at Sarah Lane station to replace the retired switch at Cottageville  Install new 138/12 kV 20 MVA transformer at Polymer station to transfer load from Mill Run station to help address overload on the 69 kV network  b3040.5 Retire Mill Run station  B3040.6 Install 28.8 MVAR cap bank at South Buffalo station  AEP (100%)  AEP (100%)		<u> </u>		
utilizing 795 26/7 ACSR conductor  Install new 3-way phase over phase switch at Sarah Lane station to replace the retired switch at Cottageville  Install new 138/12 kV 20 MVA transformer at Polymer station to transfer load from Mill Run station to help address overload on the 69 kV network  b3040.5 Retire Mill Run station  b3040.6 Install 28.8 MVAR cap bank at South Buffalo station  b3041.2 Adjust CT tap ratio at Ronceverte 138 kV Reconductor Kammer – George Washington 138 kV  b3085 line (approx. 0.08 mile).  Replace the wave trap at Kammer 138 kV Ine Str's 1-37 (1.5 miles), utilizing 795 26/7  ACSR conductor  Rebuild New Liberty – North Baltimore 34 kV line Str's 1-11 (0.5 mile), utilizing 795  b3086.2 AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)				
Source   Conductor	b3040.2			AEP (100%)
Install new 3-way phase over phase switch at Sarah Lane station to replace the retired switch at Cottageville  Install new 138/12 kV 20 MVA transformer at Polymer station to transfer load from Mill Run station to help address overload on the 69 kV network  b3040.5 Retire Mill Run station  B3040.6 Install 28.8 MVAR cap bank at South Buffalo station  b3041.2 Adjust CT tap ratio at Ronceverte 138 kV  Reconductor Kammer – George Washington 138 kV line (approx. 0.08 mile). Replace the wave trap at Kammer 138 kV  Rebuild New Liberty – Findlay 34 kV line Str's 1–37 (1.5 miles), utilizing 795  b3086.2 Findlay 34 kV line Str's 1-11 (0.5 mile), utilizing 795  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)		_		
b3040.3   phase switch at Sarah Lane station to replace the retired switch at Cottageville				
Station to replace the retired switch at Cottageville   Install new 138/12 kV 20   MVA transformer at Polymer station to transfer load from Mill Run station to help address overload on the 69 kV network   AEP (100%)				
Station to replace the retired   switch at Cottageville   Install new 138/12 kV 20   MVA transformer at Polymer   station to transfer load from   Mill Run station to help   address overload on the 69   kV network   AEP (100%)	b3040 3	_ <del>-</del>		AFP (100%)
Install new 138/12 kV 20   MVA transformer at Polymer station to transfer load from Mill Run station to help address overload on the 69 kV network	03010.3	-		1121 (10070)
b3040.4 MVA transformer at Polymer station to transfer load from Mill Run station to help address overload on the 69 kV network  b3040.5 Retire Mill Run station  b3040.6 Install 28.8 MVAR cap bank at South Buffalo station  b3051.2 Adjust CT tap ratio at Ronceverte 138 kV  Reconductor Kammer – George Washington 138 kV line (approx. 0.08 mile).  Replace the wave trap at Kammer 138 kV  Rebuild New Liberty – Findlay 34 kV line Str's 1–37 (1.5 miles), utilizing 795 26/7  ACSR conductor  Rebuild New Liberty – North Baltimore 34 kV line Str's 1–11 (0.5 mile), utilizing 795		<u> </u>		
b3040.4 station to transfer load from Mill Run station to help address overload on the 69 kV network  b3040.5 Retire Mill Run station  b3040.6 Install 28.8 MVAR cap bank at South Buffalo station  b3051.2 Adjust CT tap ratio at Ronceverte 138 kV  Reconductor Kammer – George Washington 138 kV line (approx. 0.08 mile). Replace the wave trap at Kammer 138 kV  Rebuild New Liberty – Findlay 34 kV line Str's 1–37 (1.5 miles), utilizing 795 26/7 ACSR conductor  Rebuild New Liberty – North Baltimore 34 kV line Str's 1–11 (0.5 mile), utilizing 795				
Mill Run station to help address overload on the 69 kV network		MVA transformer at Polymer		
Mill Run station to help address overload on the 69 kV network	b3040.4	station to transfer load from		AED (100%)
B3040.5   Retire Mill Run station   AEP (100%)	03040.4	Mill Run station to help		AEI (100%)
b3040.5 Retire Mill Run station  b3040.6 Install 28.8 MVAR cap bank at South Buffalo station  b3051.2 Adjust CT tap ratio at Ronceverte 138 kV  Reconductor Kammer – George Washington 138 kV line (approx. 0.08 mile). Replace the wave trap at Kammer 138 kV  Rebuild New Liberty – Findlay 34 kV line Str's 1–37 (1.5 miles), utilizing 795 26/7 ACSR conductor  Rebuild New Liberty – North Baltimore 34 kV line Str's 1–11 (0.5 mile), utilizing 795  AEP (100%)  AEP (100%)  AEP (100%)  AEP (100%)		address overload on the 69		
b3040.6		kV network		
b3040.6	b3040.5	Retire Mill Run station		AEP (100%)
b3051.2 Adjust CT tap ratio at Ronceverte 138 kV  Reconductor Kammer — George Washington 138 kV  b3085 line (approx. 0.08 mile). Replace the wave trap at Kammer 138 kV  Rebuild New Liberty — Findlay 34 kV line Str's 1—37 (1.5 miles), utilizing 795 26/7 ACSR conductor  Rebuild New Liberty — North Baltimore 34 kV line Str's 1— 11 (0.5 mile), utilizing 795				,
b3051.2 Adjust CT tap ratio at Ronceverte 138 kV  Reconductor Kammer — George Washington 138 kV line (approx. 0.08 mile). Replace the wave trap at Kammer 138 kV  Rebuild New Liberty — Findlay 34 kV line Str's 1—37 (1.5 miles), utilizing 795 26/7 ACSR conductor  Rebuild New Liberty — North Baltimore 34 kV line Str's 1— 11 (0.5 mile), utilizing 795	b3040.6			AEP (100%)
Reconductor Kammer - George Washington 138 kV   Jine (approx. 0.08 mile). Replace the wave trap at Kammer 138 kV   Rebuild New Liberty - Findlay 34 kV line Str's 1-37 (1.5 miles), utilizing 795 26/7   ACSR conductor   Rebuild New Liberty - North Baltimore 34 kV line Str's 1-11 (0.5 mile), utilizing 795   AEP (100%)				
Ronceverte 138 kV  Reconductor Kammer — George Washington 138 kV line (approx. 0.08 mile). Replace the wave trap at Kammer 138 kV  Rebuild New Liberty — Findlay 34 kV line Str's 1—37 (1.5 miles), utilizing 795 26/7 ACSR conductor  Rebuild New Liberty — North Baltimore 34 kV line Str's 1— 11 (0.5 mile), utilizing 795  AEP (100%)	b3051.2			AFP (100%)
b3085 George Washington 138 kV line (approx. 0.08 mile). Replace the wave trap at Kammer 138 kV  Rebuild New Liberty – Findlay 34 kV line Str's 1–37 (1.5 miles), utilizing 795 26/7 ACSR conductor  Rebuild New Liberty – North Baltimore 34 kV line Str's 1- 11 (0.5 mile), utilizing 795	03031.2			7121 (10070)
b3085 line (approx. 0.08 mile). Replace the wave trap at Kammer 138 kV  Rebuild New Liberty – Findlay 34 kV line Str's 1–37 (1.5 miles), utilizing 795 26/7 ACSR conductor  Rebuild New Liberty – North Baltimore 34 kV line Str's 1- 11 (0.5 mile), utilizing 795				
Replace the wave trap at Kammer 138 kV  Rebuild New Liberty – Findlay 34 kV line Str's 1–37 (1.5 miles), utilizing 795 26/7 ACSR conductor  Rebuild New Liberty – North Baltimore 34 kV line Str's 1- 11 (0.5 mile), utilizing 795  AEP (100%)				
Kammer 138 kV   Rebuild New Liberty -   Findlay 34 kV line Str's 1-37   (1.5 miles), utilizing 795 26/7   ACSR conductor   Rebuild New Liberty - North   Baltimore 34 kV line Str's 1-   11 (0.5 mile), utilizing 795   AEP (100%)	b3085			AEP (100%)
b3086.1 Rebuild New Liberty – Findlay 34 kV line Str's 1–37 (1.5 miles), utilizing 795 26/7 ACSR conductor  Rebuild New Liberty – North Baltimore 34 kV line Str's 1- 11 (0.5 mile), utilizing 795  Rebuild New Liberty – North Baltimore 34 kV line Str's 1- 11 (0.5 mile), utilizing 795  AEP (100%)				
b3086.1 Findlay 34 kV line Str's 1–37 (1.5 miles), utilizing 795 26/7 ACSR conductor  Rebuild New Liberty – North Baltimore 34 kV line Str's 1- 11 (0.5 mile), utilizing 795  AEP (100%)  AEP (100%)				
b3086.1 (1.5 miles), utilizing 795 26/7				
(1.5 miles), utilizing 795 26/7  ACSR conductor  Rebuild New Liberty – North  Baltimore 34 kV line Str's 1-  11 (0.5 mile), utilizing 795  AEP (100%)	b3086.1	Findlay 34 kV line Str's 1–37		ΛFP (100%)
b3086.2 Rebuild New Liberty – North Baltimore 34 kV line Str's 1- 11 (0.5 mile), utilizing 795  AEP (100%)		(1.5 miles), utilizing 795 26/7		ALI (100%)
b3086.2 Baltimore 34 kV line Str's 1- 11 (0.5 mile), utilizing 795 AEP (100%)				
11 (0.5 mile), utilizing 795				
11 (0.5 mile), utilizing 795	h3086.2			ΔFP (100%)
26/7 ACSR conductor	03080.2	l		ALI (100/0)
		26/7 ACSR conductor		

required 11	ansinission Emancements	Ailiuai Revenue Require	ment Responsible Customer(s)
	Rebuild West Melrose –		
b3086.3	Whirlpool 34 kV line Str's		AEP (100%)
	55–80 (1 mile), utilizing 795		(,
	26/7 ACSR conductor		
	North Findlay station: Install		
	a 138 kV 3000A 63kA line		
b3086.4	breaker and low side 34.5 kV		AEP (100%)
03000.4	2000A 40kA breaker, high		ALI (100%)
	side 138 kV circuit switcher		
	on T1		
	Ebersole station: Install		
	second 90 MVA 138/69/34		
b3086.5	kV transformer. Install two		AEP (100%)
	low side (69 kV) 2000A		
	40kA breakers for T1 and T2		
	Construct a new greenfield		
	station to the west (approx.		
	1.5 miles) of the existing		
	Fords Branch Station in the		
	new Kentucky Enterprise		
	Industrial Park. This station		
	will consist of six 3000A		
b3087.1	40kA 138 kV breakers laid		AEP (100%)
	out in a ring arrangement, two		` ,
	30 MVA 138/34.5 kV		
	transformers, and two 30		
	MVA 138/12 kV		
	transformers. The existing		
	Fords Branch Station will be		
	retired		
	Construct approximately 5		
	miles of new double circuit		
1 2007 2	138 kV line in order to loop		A ED (1000)
b3087.2	the new Kewanee station into		AEP (100%)
	the existing Beaver Creek –		
	Cedar Creek 138 kV circuit		
	STOM CICCH 150 H , CHOCK		

11040111	distribution Emittine Control of the	1	rement responsible editioner(s)
b3087.3	Remote end work will be required at Cedar Creek Station		AEP (100%)
1.0005.4	Install 28.8 MVar switching		A FID (1000())
b3087.4	shunt at the new Fords		AEP (100%)
	Branch substation		
	Rebuild Lakin – Racine Tap		
b3095	69 kV line section (9.2 miles)		AEP (100%)
03073	to 69 kV standards, utilizing		74L1 (100%)
	795 26/7 ACSR conductor		
	Install a 138 kV 3000A 40 kA		
	circuit switcher on the high		
b3099	side of the existing 138/34.5		AEP (100%)
	kV transformer No.5 at		
	Holston station		
	Replace the 138 kV MOAB		
	switcher "YY" with a new		
b3100	138 kV circuit switcher on the		AEP (100%)
	high side of Chemical		( )
	transformer No.6		
	Rebuild the 1/0 Cu. conductor		
	sections (approx. 1.5 miles) of		
	the Fort Robinson – Moccasin		
	Gap 69 kV line section		
	(approx. 5 miles) utilizing		
b3101	556 ACSR conductor and		AEP (100%)
	upgrade existing relay trip		
	limit (WN/WE: 63 MVA, line		
	limited by remaining		
	conductor sections)		
	Replace existing 50 MVA		
	138/69 kV transformers #1		
b3102	and #2 (both 1957 vintage) at		AEP (100%)
03102	Fremont station with new 130		ALF (100%)
	MVA 138/69 kV transformers		

Required Transmission Enhancements		Ailluai Kevenue Kequile	ement Responsible Customer(s)
	Install a 138/69 kV		
	transformer at Royerton		
	station. Install a 69 kV bus		
	with one 69 kV breaker		
b3103.1	toward Bosman station.		AEP (100%)
03103.1	Rebuild the 138 kV portion		ALF (100%)
	into a ring bus configuration		
	built for future breaker and a		
	half with four 138 kV		
	breakers		
	Rebuild the		
	Bosman/Strawboard station in		
b3103.2	the clear across the road to		AED (1000/)
03103.2	move it out of the flood plain		AEP (100%)
	and bring it up to 69 kV		
	standards		
	Retire 138 kV breaker L at		
b3103.3	Delaware station and re-		AED (1000/)
03103.3	purpose 138 kV breaker M		AEP (100%)
	for the Jay line		
	Retire all 34.5 kV equipment		
b3103.4	at Hartford City station. Re-		AEP (100%)
03103.4	purpose breaker M for the		ALF (100%)
	Bosman line 69 kV exit		
	Rebuild the 138 kV portion of		
	Jay station as a 6 breaker,		
	breaker and a half station re-		
	using the existing breakers		
b3103.5	"A", "B", and "G." Rebuild		AEP (100%)
	the 69 kV portion of this		ALF (100%)
	station as a 6 breaker ring bus		
	re-using the 2 existing 69 kV		
	breakers. Install a new 138/69		
	kV transformer		

Trequired Transmission Emiliancements		1	rement Responsible Customer(s)
	Rebuild the 69 kV Hartford		
	City – Armstrong Cork line		
b3103.6	but instead of terminating it		AEP (100%)
	into Armstrong Cork,		
	terminate it into Jay station		
b3103.7	Build a new 69 kV line from		AEP (100%)
03103.7	Armstrong Cork – Jay station		ALF (100%)
	Rebuild the 34.5 kV		
	Delaware – Bosman line as		
b3103.8	the 69 kV Royerton –		AED (1000/)
03103.8	Strawboard line. Retire the		AEP (100%)
	line section from Royerton to		
	Delaware stations		
	Perform a sag study on the		
	Polaris – Westerville 138 kV		
b3104	line (approx. 3.6 miles) to		AEP (100%)
03104	increase the summer		ALF (100%)
	emergency rating to 310		
	MVA		
	Rebuild the Delaware – Hyatt		
	138 kV line (approx. 4.3		
b3105	miles) along with replacing		AEP (100%)
	conductors at both Hyatt and		
	Delaware substations		
	Perform a sag study (6.8		
	miles of line) to increase the		
	SE rating to 310 MVA. Note		
b3106	that results from the sag study		AEP (100%)
	could cover a wide range of		
	outcomes, from no work		
	required to a complete rebuild		
	Rebuild 5.2 miles Bethel –		
b3109	Sawmill 138 kV line		AEP (100%)
	including ADSS		

required 11	ansinission Emiancements	Ailiuai Revenue Require	ment Responsible Customer(s)
b3112	Construct a single circuit 138 kV line (approx. 3.5 miles) from Amlin to Dublin using 1033 ACSR Curlew (296 MVA SN), convert Dublin station into a ring configuration, and reterminating the Britton UG		AEP (100%)
	cable to Dublin station		
b3116	Replace existing Mullens 138/46 kV 30 MVA transformer No.4 and associated protective equipment with a new 138/46 kV 90 MVA transformer and associated protective equipment		AEP (100%)
b3118.1	Expand existing Chadwick station and install a second 138/69 kV transformer at a new 138 kV bus tied into the Bellefonte – Grangston 138 kV circuit. The 69 kV bus will be reconfigured into a ring bus arrangement to tie the new transformer into the existing 69 kV via installation of four 3000A 63 kA 69 kV circuit breakers		AEP (100%)
b3118.2	Perform 138 kV remote end work at Grangston station		AEP (100%)
b3118.3	Perform 138 kV remote end work at Bellefonte station		AEP (100%)
b3118.4	Relocate the Chadwick – Leach 69 kV circuit within Chadwick station		AEP (100%)

Terminate the Bellefonte – Grangston 138 kV circuit to the Chadwick 138 kV bus  Chadwick – Tri-State #2 138	Tioquilou III	ansimission Emigneements	Thiniau Tte venue Ttequite	ment responsible editorner(s)
the Chadwick 138 kV bus  Chadwick - Tri-State #2 138				
Chadwick - Tri-State #2 138	b3118.5			AEP (100%)
kV circuit will be reconfigured within the station to terminate into the newly established 138 kV bus #2 at Chadwick due to construability aspects  Reconductor Chadwick — Leach and Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach — Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay — Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to				
reconfigured within the station to terminate into the newly established 138 kV bus #2 at Chadwick due to construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach — Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild 38 kV line as double circuit 138 kV line as double circuit 138 kV line as double circuit 138 kV line isingle circuit 69 kV line from near Pennville station to				
b3118.6 station to terminate into the newly established 138 kV bus #2 at Chadwick due to construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach — Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay — Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to				
newly established 138 kV bus #2 at Chadwick due to construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach — Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay — Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to				
#2 at Chadwick due to construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  b3118.7 Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach — Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers b3118.10 Rebuild the Jay — Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to	b3118.6			AEP (100%)
construability aspects  Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  b3118.7 Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach — Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay — Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		•		
Reconductor Chadwick — Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to				
Leach and Chadwick — England Hill 69 kV lines with 795 ACSS conductor.  Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach — Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay — Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to				
England Hill 69 kV lines with 795 ACSS conductor. Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach — Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay — Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to				
b3118.7 Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		Leach and Chadwick —		
b3118.7 Perform a LiDAR survey and a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		England Hill 69 kV lines with		
a sag study to confirm that the reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers  (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		795 ACSS conductor.		
reconductored circuits would maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to	b3118.7	Perform a LiDAR survey and		AEP (100%)
maintain acceptable clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		•		
clearances  Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		reconductored circuits would		
Replace the 20 kA 69 kV circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		maintain acceptable		
circuit breaker 'F' at South Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers b3118.10  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		clearances		
b3118.8 Neal station with a new 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		Replace the 20 kA 69 kV		
b3118.8 3000A 40 kA 69 kV circuit breaker. Replace line risers towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		circuit breaker 'F' at South		
b3118.9  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to	h3118 8	Neal station with a new		AED (100%)
towards Leach station  Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to	03110.0	3000A 40 kA 69 kV circuit		ALI (100%)
Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		breaker. Replace line risers		
b3118.9  Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to  AEP (100%)  AEP (100%)		towards Leach station		
section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers b3118.10 (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to				
section (approx. 0.3 mile) with 795 ACSS conductor  Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to	h3118 0	Leach – Miller S.S 69 kV line		ΔED (100%)
Replace 69 kV line risers (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to	03110.9	section (approx. 0.3 mile)		ALI (10070)
b3118.10 (towards Chadwick) at Leach station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		with 795 ACSS conductor		
station  Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		Replace 69 kV line risers		
Rebuild the Jay – Pennville 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to	b3118.10	(towards Chadwick) at Leach		AEP (100%)
b3119.1 138 kV line as double circuit 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		station		
b3119.1 138/69 kV. Build a new 9.8 mile single circuit 69 kV line from near Pennville station to		Rebuild the Jay – Pennville		
mile single circuit 69 kV line from near Pennville station to				
from near Pennville station to	h2110.1	138/69 kV. Build a new 9.8		AFD (100%)
from near Pennville station to	03117.1			ALI (10070)
North Portland station				
		North Portland station		

Install three (3) 69 kV	required in	distinssion Emidicements	Third Revenue Requirement Responsible Editorier(s)
b3119.2 string and add a low side breaker on the Jay transformer 2  Install two (2) 69 kV breakers at North Portland station to complete the ring and allow for the new line  At Conesville 138 kV station: Remove line leads to generating units, transfer plant AC service to existing station service feeds in Conesville 345/138 kV yard, and separate and reconfigure protection schemes  At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – Whetstone 69 kV line (approx. 41 miles)  Rebuild the Whetstone – Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141  Rebuild the Knox Creek – Coal Creek 69 kV line  Rebuild the Knox Creek – Coal Creek 69 kV line  Rebuild the Knox Creek – Coal Creek 69 kV line  Rebuild the Knox Creek – Coal Creek 69 kV line  AEP (100%)		` '	
breaker on the Jay transformer 2  Install two (2) 69 kV breakers at North Portland station to complete the ring and allow for the new line  At Conesville 138 kV station: Remove line leads to generating units, transfer plant AC service to existing station service feeds in Conesville 345/138 kV yard, and separate and reconfigure protection schemes  At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140  Rebuild the Knox Creek 6 b3141  Rebuild the Knox Creek – b3141  Rebuild the Knox Creek – Coal Creek 69 kV line AEP (100%)			
transformer 2	b3119.2		AEP (100%)
b3119.3 Install two (2) 69 kV breakers at North Portland station to complete the ring and allow for the new line  At Conesville 138 kV station: Remove line leads to generating units, transfer plant AC service to existing station service feeds in Conesville 345/138 kV yard, and separate and reconfigure protection schemes  At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3140  Rebuild the Knox Creek – Coal Creek 69 kV line AEP (100%)		breaker on the Jay	
at North Portland station to complete the ring and allow for the new line  At Conesville 138 kV station: Remove line leads to generating units, transfer plant AC service to existing station service feeds in Conesville 345/138 kV yard, and separate and reconfigure protection schemes  At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141  Rebuild the Knox Creek – Coal Creek 69 kV line Rebuild the Knox Creek – Coal Creek 69 kV line AEP (100%)		transformer 2	
Complete the ring and allow for the new line		Install two (2) 69 kV breakers	
complete the ring and allow for the new line  At Conesville 138 kV station: Remove line leads to generating units, transfer plant AC service to existing station service feeds in Conesville 345/138 kV yard, and separate and reconfigure protection schemes  At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140  Rebuild the Knox Creek – Coal Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – Coal Creek 69 kV line AEP (100%)	h3110 3	at North Portland station to	AED (100%)
At Conesville 138 kV station:   Remove line leads to generating units, transfer     plant AC service to existing   station service feeds in     Conesville 345/138 kV yard, and separate and reconfigure   protection schemes     At East Lima and Haviland     138 kV stations, replace line   relays and wavetrap on the     East Lima – Haviland 138 kV     facility     Rebuild 3.11 miles of the     LaPorte Junction – New     Buffalo 69 kV line with 795   ACSR     Rebuild the Garden Creek –     b3139   Whetstone 69 kV line   (approx. 4 miles)     Rebuild the Whetstone –     b3140   Knox Creek 69 kV line   (approx. 3.1 miles)     Rebuild the Knox Creek –     b3141   Coal Creek 69 kV line   AEP (100%)	03117.3		ALI (100%)
Remove line leads to generating units, transfer plant AC service to existing station service feeds in Conesville 345/138 kV yard, and separate and reconfigure protection schemes  At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – b3139 Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – Coal Creek 69 kV line AEP (100%)		for the new line	
generating units, transfer plant AC service to existing station service feeds in Conesville 345/138 kV yard, and separate and reconfigure protection schemes  At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – Coal Creek 69 kV line  Rebuild the Knox Creek – Coal Creek 69 kV line  Rebuild the Knox Creek – Coal Creek 69 kV line  AEP (100%)		At Conesville 138 kV station:	
b3129 plant AC service to existing station service feeds in Conesville 345/138 kV yard, and separate and reconfigure protection schemes  At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – Coal Creek 69 kV line  Rebuild the Knox Creek – Coal Creek 69 kV line  Rebuild the Knox Creek – Coal Creek 69 kV line  AEP (100%)		Remove line leads to	
station service feeds in Conesville 345/138 kV yard, and separate and reconfigure protection schemes  At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – b3139 Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141 Coal Creek 69 kV line  AEP (100%)  AEP (100%)		generating units, transfer	
station service feeds in Conesville 345/138 kV yard, and separate and reconfigure protection schemes  At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – b3139 Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141 Coal Creek 69 kV line AEP (100%)	b2120	plant AC service to existing	AED (100%)
and separate and reconfigure protection schemes  At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – b3139 Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141 Coal Creek 69 kV line  AEP (100%)  AEP (100%)	03129	station service feeds in	AEF (100%)
Description schemes   At East Lima and Haviland   138 kV stations, replace line   relays and wavetrap on the   East Lima – Haviland 138 kV   facility		Conesville 345/138 kV yard,	
At East Lima and Haviland 138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR Rebuild the Garden Creek – b3139  Rebuild the Garden Creek – b3140  Rebuild the Whetstone – b3140  Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141  Coal Creek 69 kV line  AEP (100%)		and separate and reconfigure	
138 kV stations, replace line relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – b3139 Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141 Coal Creek 69 kV line  AEP (100%)		protection schemes	
b3131 relays and wavetrap on the East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – b3139 Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141 Coal Creek 69 kV line  AEP (100%)  AEP (100%)		At East Lima and Haviland	
East Lima – Haviland 138 kV facility  Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141  Coal Creek 69 kV line  AEP (100%)		138 kV stations, replace line	
Sacility   Rebuild 3.11 miles of the   LaPorte Junction - New   Buffalo 69 kV line with 795   ACSR	b3131		AEP (100%)
Rebuild 3.11 miles of the LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – b3139 Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141 Coal Creek 69 kV line  AEP (100%)  AEP (100%)		East Lima – Haviland 138 kV	
LaPorte Junction – New Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – b3139 Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141 Coal Creek 69 kV line  AEP (100%)  AEP (100%)		facility	
Buffalo 69 kV line with 795   ACSR		Rebuild 3.11 miles of the	
Buffalo 69 kV line with 795 ACSR  Rebuild the Garden Creek – b3139 Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141 Coal Creek 69 kV line  AEP (100%)	h3132	LaPorte Junction – New	AED (100%)
Rebuild the Garden Creek –  b3139 Whetstone 69 kV line	03132	Buffalo 69 kV line with 795	ALI (100%)
b3139 Whetstone 69 kV line (approx. 4 miles)  Rebuild the Whetstone – b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141 Coal Creek 69 kV line  AEP (100%)  AEP (100%)			
(approx. 4 miles)  Rebuild the Whetstone –  b3140  Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek –  b3141  Coal Creek 69 kV line  AEP (100%)		Rebuild the Garden Creek –	
Rebuild the Whetstone –	b3139	Whetstone 69 kV line	AEP (100%)
b3140 Knox Creek 69 kV line (approx. 3.1 miles)  Rebuild the Knox Creek – b3141 Coal Creek 69 kV line  AEP (100%)  AEP (100%)		(approx. 4 miles)	
(approx. 3.1 miles)  Rebuild the Knox Creek –  b3141 Coal Creek 69 kV line  AEP (100%)	b3140	Rebuild the Whetstone –	
Rebuild the Knox Creek – b3141 Coal Creek 69 kV line AEP (100%)		Knox Creek 69 kV line	AEP (100%)
b3141 Coal Creek 69 kV line AEP (100%)		(approx. 3.1 miles)	
		Rebuild the Knox Creek -	
(approx. 2.9 miles)	b3141	Coal Creek 69 kV line	AEP (100%)
		(approx. 2.9 miles)	

required 11	ansinission Emancements	7 Miliaai Revenae Requi	ement Responsible Customer(s)
	Rebuild the 46 kV Bradley – Scarbro line to 96 kV		
	standards using 795 ACSR to		
	achieve a minimum rate of		
b3148.1	120 MVA. Rebuild the new		AEP (100%)
	line adjacent to the existing		,
	one leaving the old line in		
	service until the work is		
	completed		
	Bradley remote end station		
b3148.2	work, replace 46 kV bus,		AEP (100%)
03140.2	install new 12 MVAR		71L1 (10070)
	capacitor bank		
	Replace the existing switch at		
b3148.3	Sun substation with a 2-way		AEP (100%)
	SCADA-controlled motor-		,
	operated air-breaker switch  Remote end work and		
b3148.4			AEP (100%)
03148.4	associated equipment at Scarbro station		AEP (100%)
	Retire Mt. Hope station and		
b3148.5	transfer load to existing Sun		AEP (100%)
03140.3	station		ALI (10070)
	Rebuild the 2.3 mile Decatur		
b3149	– South Decatur 69 kV line		AEP (100%)
	using 556 ACSR		(,
	Rebuild Ferguson 69/12 kV		
	station in the clear as the		
	138/12 kV Bear station and		
	connect it to an approx. 1		
b3150	mile double circuit 138 kV		AEP (100%)
	extension from the Aviation –		
	Ellison Road 138 kV line to		
	remove the load from the 69		
	kV line		

rtequirea iii		Timital Revenue Requirement Responsible editionier(s)
b3151.1	Rebuild the 30 mile Gateway  - Wallen 34.5 kV circuit as the 27 mile Gateway - Wallen 69 kV line	AEP (100%)
b3151.2	Retire approx. 3 miles of the Columbia – Whitley 34.5 kV line	AEP (100%)
b3151.3	At Gateway station, remove all 34.5 kV equipment and install one (1) 69 kV circuit breaker for the new Whitley line entrance	AEP (100%)
b3151.4	Rebuild Whitley as a 69 kV station with two (2) lines and one (1) bus tie circuit breaker	AEP (100%)
b3151.5	Replace the Union 34.5 kV switch with a 69 kV switch structure	AEP (100%)
b3151.6	Replace the Eel River 34.5 kV switch with a 69 kV switch structure	AEP (100%)
b3151.7	Install a 69 kV Bobay switch at Woodland station	AEP (100%)
b3151.8	Replace the Carroll and Churubusco 34.5 kV stations with the 69 kV Snapper station. Snapper station will have two (2) line circuit breakers, one (1) bus tie circuit breaker and a 14.4 MVAR cap bank	AEP (100%)
b3151.9	Remove 34.5 kV circuit breaker "AD" at Wallen station	AEP (100%)
b3151.10	Rebuild the 2.5 miles of the Columbia – Gateway 69 kV line	AEP (100%)

Required 113	ansmission Ennancements	Affilial Revenue Require	ment Responsible Customer(s)
	Rebuild Columbia station in		
	the clear as a 138/69 kV		
	station with two (2) 138/69		
b3151.11	kV transformers and 4-		AED (1000/)
03131.11	breaker ring buses on the high		AEP (100%)
	and low side. Station will		
	reuse 69 kV breakers "J" &		
	"K" and 138 kV breaker "D"		
	Rebuild the 13 miles of the		
b3151.12	Columbia – Richland 69 kV		AEP (100%)
	line		
	Rebuild the 0.5 mile Whitley		
b3151.13	<ul> <li>Columbia City No.1 line as</li> </ul>		AEP (100%)
	69 kV		
	Rebuild the 0.5 mile Whitley		
b3151.14	<ul> <li>Columbia City No.2 line as</li> </ul>		AEP (100%)
	69 kV		
	Rebuild the 0.6 mile double		
	circuit section of the Rob		
b3151.15	Park – South Hicksville / Rob		AEP (100%)
	Park – Diebold Road as 69		
	kV		
	Construct an approx. 2.4		
	miles double circuit 138 kV		
b3160.1	extension using 1033 ACSR		AEP (100%)
03100.1	(Aluminum Conductor Steel		ALI (100%)
	Reinforced) to connect Lake		
	Head to the 138 kV network		
	Retire the approx.2.5 miles		
b3160.2	34.5 kV Niles – Simplicity		AEP (100%)
	Tap line		
b3160.3	Retire the approx.4.6 miles		AEP (100%)
03100.3	Lakehead 69 kV Tap		ALI (10070)

required 11	ansimission Emianecinents	7 Himadi Ne vende Requi	efficit Responsible Customer(s)
	Build new 138/69 kV drop		
	down station to feed		
	Lakehead with a 138 kV		
b3160.4	breaker, 138 kV switcher,		AEP (100%)
	138/69 kV transformer and a		
	138 kV Motor-Operated Air		
	Break		
	Rebuild the approx.1.2 miles		
	Buchanan South 69 kV		
b3160.5	Radial Tap using 795 ACSR		AEP (100%)
	(Aluminum Conductor Steel		
	Reinforced)		
	Rebuild the approx.8.4 miles		
	69 kV Pletcher – Buchanan		
	Hydro line as the approx. 9		
b3160.6	miles Pletcher – Buchanan		AEP (100%)
	South 69 kV line using 795		
	ACSR (Aluminum Conductor		
	Steel Reinforced)		
	Install a PoP (Point-of-		
	Presence) switch at Buchanan		
b3160.7	South station with 2 line		AEP (100%)
	MOABs (Motor-Operated Air		
	Break)		

required 11	ansimission Emancements	Amuai Revenue Require	ement Responsible Customer(s)
	Retire approximately 38		
	miles of the 44 mile Clifford		
	<ul> <li>Scottsville 46 kV circuit.</li> </ul>		
	Build new 138 kV "in and		
	out" to two new distribution		
	stations to serve the load		
	formerly served by Phoenix,		
	Shipman, Schuyler (AEP),		
	and Rockfish stations.		
	Construct new 138 kV lines		
b3208	from Joshua Falls – Riverville		AEP (100%)
	(approx. 10 miles) and		
	Riverville – Gladstone		
	(approx. 5 miles). Install		
	required station upgrades at		
	Joshua Falls, Riverville and		
	Gladstone stations to		
	accommodate the new 138		
	kV circuits. Rebuild Reusen –		
	Monroe 69 kV (approx. 4		
	miles)		
	Rebuild the 10.5 mile Berne –		
b3209	South Decatur 69 kV line		AEP (100%)
	using 556 ACSR		
	Replace approx. 0.7 mile		
b3210	Beatty – Galloway 69 kV line		AEP (100%)
	with 4000 kcmil XLPE cable		

#### SCHEDULE 12 – APPENDIX A

### (18) Duquesne Light Company

Required 1		nual Revenue Requirement	Responsible Customer(s)
b2175.1	200 MVAR shunt reactor at Brunot Island 345 kV		DL (100%)
101750	200 MVAR shunt reactor on		DI (1000()
b2175.2	future Brunot Island –		DL (100%)
	Carson 345 kV circuit		
1.2100	Revise the reclosing for the		DI (1000)
b2198	Brunot Island 138 kV		DL (100%)
	breaker 'Z-40 COLLIER'		
	Revise the reclosing for the		
b2199	Brunot Island 138 kV		DL (100%)
	breaker 'Z-41 COLLIER'		
	Revise the reclosing for the		
b2200	Crescent 138 kV breaker 'Z-		DL (100%)
	29 Beaver'		
	Revise the reclosing for the		
b2201	Crescent 138 kV breaker 'Z-		DL (100%)
	82 VALLEY'		
	Revise the reclosing for the		
b2202	Crescent 138 kV breaker 'Z-		DL (100%)
	21 NORTH'		
	Revise the reclosing for the		
b2203	Elrama 138 kV breaker		DL (100%)
	'Z18-USX CLAI'		
	Revise the reclosing for the		
b2204	Elrama 138 kV breaker		DL (100%)
	'Z13-WEST MIF'		
	Revise the reclosing for the		
b2205	Elrama 138 kV breaker 'Z15		DL (100%)
	-DRAVOSBU'		
	Revise the reclosing for the		
b2206	Woodville 138 kV breaker		DL (100%)
	'Z-106 PINEY'		
	Revise the reclosing for the		
b2207	Woodville 138 kV breaker		DL (100%)
	'Z-64 COLLIER'		, , , ,
	Revise the reclosing for the		
b2208	Beaver Valley 138 kV		DL (100%)
	breaker 'Z-28 CRESCEN'		, , , ,
L		II.	

### **Duquesne Light Company (cont.)**

rtequired r	Tailstillssion Emianeements Am	idai Kevende Kequirement	responsible edistorier(s)
b2209	Revise the reclosing for the Cheswick 138 kV breaker Z-51 WILMERD'		DL (100%)
b2280	Replace the USAP 138kV breaker 'XFMR'		DL (100%)
b2303	Revise the reclosing to the Dravosburg 138kV breaker 'Z73 West Mifflin' from 5 sec to 15 sec		DL (100%)
b2563	Operate with the Crescent 345/138 kV #3 autotransformer in-service by replacing 8 overdutied 138 kV breakers at Crescent, 3 138 kV breakers at Beaver Valley, install #1 section 345 kV breaker for 331 circuit at Crescent		DL (100%)
b2632	Replace the Oakland 138 kV 'Z-101 Arsenal' breaker		DL (100%)
b2639	Replace the Crescent 138 kV 'NO3 – 4 138' breaker with a 63kA breaker		DL (100%)
b2640	Replace the Crescent 138 kV 'Z-143 SWCKLY' breaker with a 63kA breaker		DL (100%)
b2641	Replace the Crescent 138 kV 'Z-24 MONTOUR' breaker with a 63kA breaker		DL (100%)
b2642	Replace the Crescent 138 kV 'Z-28 BEAVER' breaker with a 63kA breaker		DL (100%)
b2689.1	Reconductor approximately 7 miles of the Woodville – Peters (Z-117) 138 kV circuit		AEC (0.99%)/ APS (66.14%)/ BGE (4.60%)/ DOM (8.81%)/ DPL (5.83%)/ ECP (0.34%)/ HTP (0.04%)/ Neptune (0.12%)/ PECO (3.39%)/ PEPCO (6.29%)/ PSEG (3.45%)

## **Duquesne Light Company (cont.)**

Required T	Transmission Enhancements	Annual Revenue Requirement	nt Responsible Customer(s)
b2689.2	Reconfigure West Mifflin- USS Clairton (Z-15) 138 kV circuit to establish Dravosburg-USS Clairton (Z-14) 138 kV circuit and West Mifflin-Wilson (Z-15) 138 kV circuit		AEC (0.99%)/ APS (66.14%)/ BGE (4.60%)/ DOM (8.81%)/ DPL (5.83%)/ ECP (0.34%)/ HTP (0.04%)/ Neptune (0.12%)/ PECO (3.39%)/ PEPCO (6.29%)/ PSEG (3.45%)
b3011.7	Replace the line terminal equipment and line breaker #85 at Dravosburg 138 kV substation in the Elwyn Z-70 line position/bay, with the breaker duty as 63kA		DL (100%)
b3011.8	Upgrade 138 kV breaker "Z-78 Logans" at Dravosburg		DL (100%)
b3012.2	Construct two new ties from a new FirstEnergy substation to a new Duquesne substation by using two separate structures – Duquesne portion		ATSI (38.21%) / DL (61.79%)
b3012.4	Establish the new tie line in place of the existing Elrama  – Mitchell 138 kV line		DL (100%)
b3015.1	Construct new Elrama 138 kV substation and connect 7 138 kV lines to new substation		DL (100%)
b3015.2	Reconductor Elrama to Wilson 138 kV line. 4.8 miles		APS (100%)
b3015.3	Reconductor Dravosburg to West Mifflin 138 kV line. 3 miles		DL (100%)
b3015.4	Run new conductor on existing tower to establish the new Dravosburg – Elrama (Z-75) circuit. 10 miles		DL (100%)

## **Duquesne Light Company (cont.)**

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3015.5	Reconductor Elrama to Mitchell 138 kV line – DL portion. 4.2 miles total. 2x795 ACSS/TW 20/7		DL (100%)
b3015.7	Reconductor Wilson to West Mifflin 138 kV line. 2 miles. 795 ACSS/TW 20/7		DL (100%)
b3061	Reconductor the West Mifflin – Dravosburg (Z-73) and Dravosburg – Elrama (Z-75) 138 kV lines		DL (100%)
b3062	Install 138 kV tie breaker at West Mifflin		DL (100%)
b3063	Reconductor the Wilson – Dravosburg (Z-72) 138 kV line (approx. 5 miles)		DL (100%)
b3064	Expand Elrama 138 kV substation to loop in existing US Steel Clariton – Piney Fork 138 kV line		DL (100%)
b3064.2	Replace the West Mifflin 138 kV breakers "Z-94", "Z-74", "Z-14", and "Z-13" with 63 kA breakers		DL (100%)
b3065	Install 138 kV tie breaker at Wilson		DL (100%)
b3084	Reconductor the Oakland – Panther Hollow 138 kV line (approx. 1 mile)		DL (100%)
b3212	The Crescent 138 kV oil- type breaker "2-5 TIE" is found to be overdutied following a model review and correction to short circuit base case		DL (100%)
b3217	Reconductor Wilson - Mitchell 138 kV line - DL portion		DL (100%)

#### SCHEDULE 12 – APPENDIX A

### (20) Virginia Electric and Power Company

rtequired 1	Tansinission Enhancements Annua	ar Revenue Requirement	responsible editioner(s)
b1698.7	Replace Loudoun 230 kV breaker '203052' with 63kA rating		Dominion (100%)
b1696.1	Replace the Idylwood 230 kV '25112' breaker with 50kA breaker		Dominion (100%)
b1696.2	Replace the Idylwood 230 kV '209712' breaker with 50kA breaker		Dominion (100%)
b1793.1	Remove the Carolina 22 SPS to include relay logic changes, minor control wiring, relay resets and SCADA programming upon completion of project		Dominion (100%)
b2281	Additional Temporary SPS at Bath County		Dominion (100%)
b2350	Reconductor 211 feet of 545.5 ACAR conductor on 59 Line Elmont - Greenwood DP 115 kV to achieve a summer emergency rating of 906 amps or greater		Dominion (100%)
b2358	Install a 230 kV 54 MVAR capacitor bank on the 2016 line at Harmony Village Substation		Dominion (100%)
b2359	Wreck and rebuild approximately 1.3 miles of existing 230 kV line between Cochran Mill - X4-039 Switching Station		Dominion (100%)
b2360	Build a new 39 mile 230 kV transmission line from Dooms - Lexington on existing right- of-way		Dominion (100%)
b2361	Construct 230 kV OH line along existing Line #2035 corridor, approx. 2.4 miles from Idylwood - Dulles Toll Road (DTR) and 2.1 miles on new right-of-way along DTR to new Scott's Run Substation		Dominion (100%)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

	Revenue Requirement Responsible Eustomer(s)
Replace the Brambleton 230 kV breaker '209502' with 63kA breaker	Dominion (100%)
Replace the Brambleton 230 kV breaker '213702' with 63kA breaker	Dominion (100%)
Replace the Brambleton 230 kV breaker 'H302' with 63kA breaker	Dominion (100%)
Build a 2nd Loudoun - Brambleton 500 kV line within the existing ROW. The Loudoun - Brambleton 230 kV line will be relocated as an underbuild on the new 500 kV line	Load-Ratio Share Allocation:  AEC (1.71%) / AEP (14.04%)  / APS (5.61%) / ATSI (8.10%)  / BGE (4.36%) / ComEd  (13.14%) / Dayton (2.15%) /  DEOK (3.23%) / DL (1.73%) /  DPL (2.65%) / Dominion  (13.03%) / EKPC (1.77%) /  JCPL (3.84%) / ME (1.93%) /  NEPTUNE* (0.45%) / OVEC  (0.07%) / PECO (5.29%) /  PENELEC (1.89%) / PEPCO  (3.82%) / PPL (4.72%) / PSEG  (6.21%) / RE (0.26%)  DFAX Allocation:  APS (25.51%) / Dominion  (74.49%)
Replace the Beaumeade 230 kV breaker '2079T2116' with 63kA	Dominion (100%)
Replace the Beaumeade 230 kV breaker '2079T2130' with 63kA	Dominion (100%)
Replace the Beaumeade 230 kV breaker '208192' with 63kA	Dominion (100%)
Replace the Beaumeade 230 kV breaker '209592' with 63kA	Dominion (100%)
Replace the Beaumeade 230 kV breaker '211692' with 63kA	Dominion (100%)
Replace the Beaumeade 230 kV breaker '227T2130' with 63kA	Dominion (100%)
	Replace the Brambleton 230 kV breaker '209502' with 63kA breaker  Replace the Brambleton 230 kV breaker '213702' with 63kA breaker  Replace the Brambleton 230 kV breaker 'H302' with 63kA breaker  Replace the Brambleton 230 kV breaker 'H302' with 63kA breaker  Build a 2nd Loudoun - Brambleton 230 kV line within the existing ROW. The Loudoun - Brambleton 230 kV line will be relocated as an underbuild on the new 500 kV line  Replace the Beaumeade 230 kV breaker '2079T2116' with 63kA  Replace the Beaumeade 230 kV breaker '208192' with 63kA  Replace the Beaumeade 230 kV breaker '209592' with 63kA  Replace the Beaumeade 230 kV breaker '211692' with 63kA  Replace the Beaumeade 230 kV breaker '211692' with 63kA

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.

<sup>\*</sup>Neptune Regional Transmission System, LLC

1		inuai Revenue Requirement	responsible constants (s)
b2403	Replace the Beaumeade 230 kV breaker '274T2130' with 63kA		Dominion (100%)
	Replace the Beaumeade		
b2404	230 kV breaker '227T2095' with 63kA		Dominion (100%)
b2405	Replace the Pleasant view 230 kV breaker '203T274' with 63kA		Dominion (100%)
b2443	Construct new underground 230 kV line from Glebe to Station C, rebuild Glebe Substation, construct 230 kV high side bus at Station C with option to install 800 MVA PAR		Dominion (97.11%) / ME (0.18%) / PEPCO (2.71%)
b2443.1	Replace the Idylwood 230 kV breaker '203512' with 50kA		Dominion (100%)
b2443.2	Replace the Ox 230 kV breaker '206342' with 63kA breaker		Dominion (100%)
b2443.3	Glebe – Station C PAR		<b>DFAX Allocation:</b> Dominion (22.57%) / PEPCO (77.43%)
b2443.6	Install a second 500/230 kV transformer at Possum Point substation and replace bus work and associated equipment as needed		Dominion (100%)
b2443.7	Replace 19 63kA 230 kV breakers with 19 80kA 230 kV breakers		Dominion (100%)
b2457	Replace 24 115 kV wood h-frames with 230 kV Dominion pole H-frame structures on the Clubhouse – Purdy 115 kV line		Dominion (100%)
b2458.1	Replace 12 wood H-frame structures with steel H- frame structures and install shunts on all conductor splices on Carolina – Woodland 115 kV		Dominion (100%)

required 1		ınnuai Revenue Requirement	Responsible Customer(s)
b2458.2	Upgrade all line switches and substation components at Carolina 115 kV to meet or exceed new conductor rating of 174 MVA		Dominion (100%)
b2458.3	Replace 14 wood H-frame structures on Carolina – Woodland 115 kV		Dominion (100%)
b2458.4	Replace 2.5 miles of static wire on Carolina – Woodland 115 kV		Dominion (100%)
b2458.5	Replace 4.5 miles of conductor between Carolina 115 kV and Jackson DP 115 kV with min. 300 MVA summer STE rating; Replace 8 wood H-frame structures located between Carolina and Jackson DP with steel H-frames		Dominion (100%)
b2460.1	Replace Hanover 230 kV substation line switches with 3000A switches		Dominion (100%)
b2460.2	Replace wave traps at Four River 230 kV and Elmont 230 kV substations with 3000A wave traps		Dominion (100%)
b2461	Wreck and rebuild existing Remington CT – Warrenton 230 kV (approx. 12 miles) as a double-circuit 230 kV line		Dominion (100%)
b2461.1	Construct a new 230 kV line approximately 6 miles from NOVEC's Wheeler Substation a new 230 kV switching station in Vint Hill area		Dominion (100%)
b2461.2	Convert NOVEC's Gainesville – Wheeler line (approximately 6 miles) to 230 kV		Dominion (100%)
b2461.3	Complete a Vint Hill – Wheeler – Loudoun 230 kV networked line		Dominion (100%)

Load-Ratio Share Allocat	
AEC (1.71%) / AEP (14.0	1%)
/ APS (5.61%) / ATSI (8.1	0%)
/ BGE (4.36%) / ComE	1
Deplete Midlethier 500 by (13.14%) / Dayton (2.15%)	)/
Replace Midlothian 500 kV breaker 563T576 and motor	%)/
operated switches with 3 DPL (2.65%) / Dominio	n
b2471 breaker 500 kV ring bus. (13.03%) / EKPC (1.77%	)/
02471   Terminate Lines # 563 Carson   JCPL (3.84%) / ME (1.939)	6)/
- Midlothian, #576 Midlothian, North Arms  NEPTUNE* (0.45%) / OX	EC
Midlothian –North Anna, Transformer #2 in new ring (0.07%) / PECO (5.29%	/
PENELEC (1.89%) / PEP	CO
(3.82%) / PPL (4.72%) / PS	SEG
(6.21%) / RE (0.26%)	
DFAX Allocation:	
Dominion (100%)	
Rebuild 115 kV Line #32	
from Halifax-South Boston (6 miles) for min. of 240 MVA	
b2504 and transfer Welco tan to Line	
#32. Moving Welco to Line Dominion (100%)	Dominion (100%)
#32 requires disabling auto-	
sectionalizing scheme	
Install structures in river to remove the 115 kV #65 line	
b2505 (Whitestone-Harmony Village)	
115 kV) from bridge and Dominion (100%)	
improve reliability of the line	
Replace the Loudoun 500 kV	
b2542 'H2T502' breaker with a 50kA breaker Dominion (100%)	
Replace the Loudoun 500 kV	
b25/3 'H2T584' breaker with a	
50kA breaker Dominion (100%)	
Reconductor wave trap at	
b2565 Carver Substation with a Dominion (100%)	
2000A wave trap  Reconductor 1.14 miles of	
existing line between ACCA	
and Hermitage and upgrade Dominion (100%)	
associated terminal equipment	

required 1	Tansinission Emiancements A	illuai Kevenue Kequirement	
			AEC (1.71%) / AEP (14.04%)
			/ APS (5.61%) / ATSI (8.10%)
			/ BGE (4.36%) / ComEd (13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: Dominion (100%)
			(13.14%) / Dayton (2.15%) /
			(13.14%) / Dayton (2.15%) / DEOK (3.23%) / DL (1.73%) / DPL (2.65%) / Dominion (13.03%) / EKPC (1.77%) / JCPL (3.84%) / ME (1.93%) / NEPTUNE* (0.45%) / OVEC (0.07%) / PECO (5.29%) / PENELEC (1.89%) / PEPCO (3.82%) / PPL (4.72%) / PSEG (6.21%) / RE (0.26%)  DFAX Allocation: Dominion (100%)
Rebuild the Eln			DPL (2.65%) / Dominion
	Rebuild the Elmont –		(13.03%) / EKPC (1.77%) /
b2582	Cunningham 500 kV line		JCPL (3.84%) / ME (1.93%) /
	8		NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
	Install 500 kV breaker at		2 011111011 (10070)
1.0500	Ox Substation to remove		D (1000()
b2583	Ox Tx#1 from H1T561		Dominion (100%)
	breaker failure outage.		
	Relocate the Bremo load		
	(transformer #5) to #2028 (Bremo-Charlottesville		
b2584	230 kV) line and		Dominion (100%)
0200.	Cartersville distribution		2 0 (10070)
	station to #2027 (Bremo-		
	Midlothian 230 kV) line		
	Reconductor 7.63 miles of existing line between		
b2585	Cranes and Stafford,		PEPCO (100%)
02303	upgrade associated line		12100 (10070)
	switches at Stafford		
	Wreck and rebuild the		
	Chesapeake – Deep Creek – Bowers Hill – Hodges		
	Ferry 115 kV line;		
b2620	minimum rating 239		Dominion (100%)
	MVA normal/emergency,		
	275 MVA load dump		
	rating		

Required 1	ransmission Enhancements An	inual Revenue Requirement	Responsible Customer(s)
b2622	Rebuild Line #47 between Kings Dominion 115 kV and Fredericksburg 115 kV to current standards with summer emergency rating of 353 MVA at 115 kV		Dominion (100%)
b2623	Rebuild Line #4 between Bremo and Structure 8474 (4.5 miles) to current standards with a summer emergency rating of 261 MVA at 115 kV		Dominion (100%)
b2624	Rebuild 115 kV Lines #18 and #145 between Possum Point Generating Station and NOVEC's Smoketown DP (approx. 8.35 miles) to current 230 kV standards with a normal continuous summer rating of 524 MVA at 115 kV		Dominion (100%)
b2625	Rebuild 115 kV Line #48 between Thole Street and Structure 48/71 to current standard. The remaining line to Sewells Point is 2007 vintage. Rebuild 115 kV Line #107 line, Sewells Point to Oakwood, between structure 107/17 and 107/56 to current standard.		Dominion (100%)
b2626	Rebuild 115 kV Line #34 between Skiffes Creek and Yorktown and the double circuit portion of 115 kV Line #61 to current standards with a summer emergency rating of 353 MVA at 115 kV		Dominion (100%)
b2627	Rebuild 115 kV Line #1 between Crewe 115 kV and Fort Pickett DP 115 kV (12.2 miles) to current standards with summer emergency rating of 261 MVA at 115 kV		Dominion (100%)

required 1	ransinission Emiancements Anni	aai Revenue Requirement	Responsible Customer(s)
b2628	Rebuild 115 kV Line #82 Everetts – Voice of America (20.8 miles) to current standards with a summer emergency rating of 261 MVA at 115 kV		Dominion (100%)
b2629	Rebuild the 115 kV Lines #27 and #67 lines from Greenwich 115 kV to Burton 115 kV Structure 27/280 to current standard with a summer emergency rating of 262 MVA at 115 kV		Dominion (100%)
b2630	Install circuit switchers on Gravel Neck Power Station GSU units #4 and #5. Install two 230 kV CCVT's on Lines #2407 and #2408 for loss of source sensing		Dominion (100%)
b2636	Install three 230 kV bus breakers and 230 kV, 100 MVAR Variable Shunt Reactor at Dahlgren to provide line protection during maintenance, remove the operational hazard and provide voltage reduction during light load conditions		Dominion (100%)
b2647	Rebuild Boydton Plank Rd – Kerr Dam 115 kV Line #38 (8.3 miles) to current standards with summer emergency rating of 353 MVA at 115 kV.		Dominion (100%)
b2648	Rebuild Carolina – Kerr Dam 115 kV Line #90 (38.7 miles) to current standards with summer emergency rating of 353 MVA 115 kV.		Dominion (100%)
b2649	Rebuild Clubhouse – Carolina 115 kV Line #130 (17.8 miles) to current standards with summer emergency rating of 353 MVA at 115 kV.		Dominion (100%)

required 1	Taristilission Emilancements Aim	uai Revenue Requirement	responsible eustomer(s)
b2649.1	Rebuild of 1.7 mile tap to Metcalf and Belfield DP (MEC) due to poor condition. The existing summer rating of the tap is 48 MVA and existing conductor is 4/0 ACSR on wood H-frames. The proposed new rating is 176 MVA using 636 ACSR conductor		Dominion (100%)
b2649.2	Rebuild of 4.1 mile tap to Brinks DP (MEC) due to wood poles built in 1962. The existing summer rating of the tap is 48 MVA and existing conductor is 4/0 ACSR and 393.6 ACSR on wood H-frames. The proposed new rating is 176 MVA using 636 ACSR conductor		Dominion (100%)
b2650	Rebuild Twittys Creek – Pamplin 115 kV Line #154 (17.8 miles) to current standards with summer emergency rating of 353 MVA at 115 kV.		Dominion (100%)

Required 11	ansimission Emancements Amin	iai Revenue Requirement	Responsible Customer(s)
b2651	Rebuild Buggs Island – Plywood 115 kV Line #127 (25.8 miles) to current standards with summer emergency rating of 353 MVA at 115 kV. The line should be rebuilt for 230 kV and operated at 115 kV.		Dominion (100%)
b2652	Rebuild Greatbridge – Hickory 115 kV Line #16 and Greatbridge – Chesapeake E.C. to current standard with summer emergency rating of 353 MVA at 115 kV.		Dominion (100%)
b2653.1	Build 20 mile 115 kV line from Pantego to Trowbridge with summer emergency rating of 353 MVA.		Dominion (100%)
b2653.2	Install 115 kV four-breaker ring bus at Pantego		Dominion (100%)
b2653.3	Install 115 kV breaker at Trowbridge		Dominion (100%)
b2654.1	Build 15 mile 115 kV line from Scotland Neck to S Justice Branch with summer emergency rating of 353 MVA. New line will be routed to allow HEMC to convert Dawson's Crossroads RP from 34.5 kV to 115 kV.		Dominion (100%)
b2654.2	Install 115 kV three-breaker ring bus at S Justice Branch		Dominion (100%)
b2654.3	Install 115 kV breaker at Scotland Neck		Dominion (100%)
b2654.3	Install a 2nd 224 MVA 230/115 kV transformer at Hathaway		Dominion (100%)

Required Tra	ansmission Enhancements Annu	al Revenue Requirement	Responsible Customer(s)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%)
			/ APS (5.61%) / ATSI (8.10%)
			/ BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
			DEOK (3.23%) / DL (1.73%) /
			DPL (2.65%) / Dominion
	Dahvild the Cynningham		(13.03%) / EKPC (1.77%) /
b2665	Rebuild the Cunningham – Dooms 500 kV line		JCPL (3.84%) / ME (1.93%) /
	Dooms 300 k v mie		NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			Dominion (100%)
b2686	Pratts Area Improvement		Dominion (100%)
			2 0111111011 (10070)
	Build a 230 kV line from		
b2686.1	Remington Substation to Gordonsville Substation		Dominion (100%)
	utilizing existing ROW		
	Install a 3rd 230/115 kV		
b2686.2	transformer at Gordonsville		Dominion (100%)
	Substation Upgrade Line 2088		
	between Gordonsville		
b2686.3	Substation and Louisa CT		Dominion (100%)
	Station		
	Replace the Remington CT		
b2686.4	230 kV breaker "2114T2155" with a 63 kA		Dominion (100%)
	breaker		` ,
	Upgrading sections of the		
b2686.11	Gordonsville – Somerset		Dominion (100%)
	115 kV circuit		
h2696 12	Upgrading sections of the		Dominion (1000/)
b2686.12	Somerset – Doubleday 115 kV circuit		Dominion (100%)
	Upgrading sections of the		
b2686.13	Orange – Somerset 115 kV		Dominion (100%)
	circuit		, , ,
1.0000 14	Upgrading sections of the		Daminia, (1000/)
b2686.14	Mitchell – Mt. Run 115 kV circuit		Dominion (100%)
	Circuit		

<sup>\*</sup>Neptune Regional Transmission System, LLC

110401110	distinssion Lindicentents	THITIGAT THE VEHICLE THE GAME!	ment responsible edisioner(s)
b2717.1	De-energize Davis – Rosslyn #179 and #180 69 kV lines		Dominion (100%)
b2717.2	Remove splicing and stop joints in manholes		Dominion (100%)
b2717.3	Evacuate and dispose of insulating fluid from various reservoirs and cables		Dominion (100%)
b2717.4	Remove all cable along the approx. 2.5 mile route, swab and cap-off conduits for future use, leave existing communication fiber in place		Dominion (100%)
b2719.1	Expand Perth substation and add a 115 kV four breaker ring		Dominion (100%)
b2719.2	Extend the Hickory Grove DP tap 0.28 miles to Perth and terminate it at Perth		Dominion (100%)
b2719.3	Split Line #31 at Perth and terminate it into the new ring bus with 2 breakers separating each of the line terminals to prevent a breaker failure from taking out both 115 kV lines		Dominion (100%)
b2720	Replace the Loudoun 500 kV 'H1T569' breakers with 50kA breaker		Dominion (100%)
b2729	Optimal Capacitors Configuration: New 175 MVAR capacitor at Brambleton, new 175 MVAR capacitor at Ashburn, new 300 MVAR capacitor at Shelhorm, new 150 MVAR capacitor at Liberty		AEC (1.96%) / BGE (14.37%) / Dominion (35.11%) / DPL (3.76%) / ECP (0.29%) / HTP (0.34%) / JCPL (3.31%) / ME (2.51%) / Neptune (0.63%) / PECO (6.26%) / PEPCO (20.23%) / PPL (3.94%) / PSEG (7.29%)

1100	distinssion Emidicellicitis 7 mildu	revenue requirement	responsible editioner(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%)
		/ APS (5.61%) / ATSI (8.10%) / BGE (4.36%) / ComEd	/ APS (5.61%) / ATSI (8.10%)
			(13.14%) / Dayton (2.15%) /
			DEOK (3.23%) / DL (1.73%) /
			DPL (2.65%) / Dominion
h2744	Rebuild the Carson – Rogers		(13.03%) / EKPC (1.77%) /
02/44	Rd 500 kV circuit		JCPL (3.84%) / ME (1.93%) /
			NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)	
			DFAX Allocation:
			Dominion (100%)
b2745	existing line between		Dominion (100%)
	Rebuild the Carson – Rogers Rd 500 kV circuit  Rebuild 21.32 miles of existing line between	` ,	
	Rebuild Line #137 Ridge Rd		
b2746 1	– Kerr Dam 115 kV, 8.0		Dominion (100%)
02740.1			Dominion (100%)
	Rebuild Line #1000 Ridge Rd		
	- Chase City 115 kV, 9.5		
b2746.2	miles, for 346 MVA summer		Dominion (100%)
	emergency rating		
b2746.3			Dominion (100%)
	Install a Motor Operated		
	Switch and SCADA control		
b2747			Dominion (100%)
	Thistenergy 8 113 KV line		

b2757	Install a +/-125 MVAr Statcom at Colington 230 kV	Dominion (100%)
b2758	Rebuild Line #549 Dooms – Valley 500kV	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%)
		DFAX Allocation: Dominion (100%)
b2759	Rebuild Line #550 Mt. Storm – Valley 500kV	Load-Ratio Share Allocation:  AEC (1.71%) / AEP (14.04%)  / APS (5.61%) / ATSI (8.10%)  / BGE (4.36%) / ComEd  (13.14%) / Dayton (2.15%) /  DEOK (3.23%) / DL (1.73%) /  DPL (2.65%) / Dominion  (13.03%) / EKPC (1.77%) /  JCPL (3.84%) / ME (1.93%) /  NEPTUNE* (0.45%) / OVEC  (0.07%) / PECO (5.29%) /  PENELEC (1.89%) / PEPCO  (3.82%) / PPL (4.72%) / PSEG  (6.21%) / RE (0.26%)  DFAX Allocation:  APS (87.50%) / ATSI (0.27%)
		APS (87.50%) / ATSI (0.37%) / DL (0.19%) / Dominion (1.04%) / EKPC (10.90%)

1100		Tio , onione rico quanto minoriti	responsible edistorier(s)
b2800	The 7 mile section from Dozier to Thompsons Corner of line #120 will be rebuilt to current standards using 768.2 ACSS conductor with a summer emergency rating of 346 MVA at 115 kV. Line is proposed to be rebuilt on single circuit steel monopole structure		Dominion (100%)
b2801	Lines #76 and #79 will be rebuilt to current standard using 768.2 ACSS conductor with a summer emergency rating of 346 MVA at 115 kV. Proposed structure for rebuild is double circuit steel monopole structure		Dominion (100%)
b2802	Rebuild Line #171 from Chase City – Boydton Plank Road tap by removing end- of-life facilities and installing 9.4 miles of new conductor. The conductor used will be at current standards with a summer emergency rating of 393 MVA at 115kV		Dominion (100%)
b2815	Build a new Pinewood 115kV switching station at the tap serving North Doswell DP with a 115kV four breaker ring bus		Dominion (100%)
b2842	Update the nameplate for Mount Storm 500 kV "57272" to be 50kA breaker		Dominion (100%)
b2843	Replace the Mount Storm 500 kV "G2TY" with 50kA breaker		Dominion (100%)
b2844	Replace the Mount Storm 500 kV "G2TZ" with 50kA breaker		Dominion (100%)

Required 11	ansinission Enhancements Amida	Revenue Requirement	Responsible Customer(s)
b2845	Update the nameplate for Mount Storm 500 kV "G3TSX1" to be 50kA breaker		Dominion (100%)
b2846	Update the nameplate for Mount Storm 500 kV "SX172" to be 50kA breaker		Dominion (100%)
b2847	Update the nameplate for Mount Storm 500 kV "Y72" to be 50kA breaker		Dominion (100%)
b2848	Replace the Mount Storm 500 kV "Z72" with 50kA breaker		Dominion (100%)
b2871	Rebuild 230 kV line #247 from Swamp to Suffolk (31 miles) to current standards with a summer emergency rating of 1047 MVA at 230 kV		Dominion (100%)
b2876	Rebuild line #101 from Mackeys – Creswell 115 kV, 14 miles, with double circuit structures. Install one circuit with provisions for a second circuit. The conductor used will be at current standards with a summer emergency rating of 262 MVA at 115 kV		Dominion (100%)
b2877	Rebuild line #112 from Fudge Hollow – Lowmoor 138 kV (5.16 miles) to current standards with a summer emergency rating of 314 MVA at 138 kV		Dominion (100%)
b2899	Rebuild 230 kV line #231 to current standard with a summer emergency rating of 1046 MVA. Proposed conductor is 2-636 ACSR		Dominion (100%)
b2900	Build a new 230/115 kV switching station connecting to 230 kV network line #2014 (Earleys – Everetts). Provide a 115 kV source from the new station to serve Windsor DP		Dominion (100%)

b2922	Rebuild 8 of 11 miles of 230 kV lines #211 and #228 to current standard with a summer emergency rating of 1046 MVA for rebuilt section. Proposed conductor is 2-636 ACSR	Dominion (100%)
b2928	Rebuild four structures of 500 kV line #567 from Chickahominy to Surry using galvanized steel and replace the river crossing conductor with 3-1534 ACSR. This will increase the line #567 line rating from 1954 MVA to 2600 MVA	Load-Ratio Share Allocation: AEC (1.71%) / AEP (14.04%) / APS (5.61%) / ATSI (8.10%)
b2929	Rebuild 230 kV line #2144 from Winfall to Swamp (4.3 miles) to current standards with a standard conductor (bundled 636 ACSR) having a summer emergency rating of 1047 MVA at 230 kV	Dominion (100%)  Dominion (100%)
b2960	Replace fixed series capacitors on 500 kV Line #547 at Lexington and on 500 kV Line #548 at Valley	See sub-IDs for cost allocations

		Load-Ratio Share Allocation:
		AEC (1.71%) / AEP (14.04%)
		/ APS (5.61%) / ATSI (8.10%)
		/ BGE (4.36%) / ComEd
		(13.14%) / Dayton (2.15%) /
		DEOK (3.23%) / DL (1.73%) /
		DPL (2.65%) / Dominion
	Replace fixed series capacitors on 500 kV Line #547 at Lexington	(13.03%) / EKPC (1.77%) /
b2960.1		JCPL (3.84%) / ME (1.93%) /
		NEPTUNE* (0.45%) / OVEC
		(0.07%) / PECO (5.29%) /
		PENELEC (1.89%) / PEPCO
		(3.82%) / PPL (4.72%) / PSEG
		(6.21%) / RE (0.26%)
		DFAX Allocation:
		DEOK (5.63%) / Dominion
		(91.06%) / EKPC (3.31%)

required 11		Revenue Requirement	Responsible Customer(s)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%)
			/ APS (5.61%) / ATSI (8.10%)
			/ BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
			DEOK (3.23%) / DL (1.73%) /
			DPL (2.65%) / Dominion
	Replace fixed series		(13.03%) / EKPC (1.77%) /
b2960.2	capacitors on 500 kV Line		JCPL (3.84%) / ME (1.93%) /
	#548 at Valley		NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
		DEOK (17.57%) / Dominion	
			(74.24%) / EKPC (8.19%)
	Rebuild approximately 3		
b2961	miles of Line #205 & Line #2003 from Chesterfield to		Dominion (100%)
	Locks & Poe respectively		` '
	Split Line #227 (Brambleton		
b2962	- Beaumeade 230 kV) and		Dominian (1000/)
02902	terminate into existing		Dominion (100%)
	Belmont substation		
b2062 1	Replace the Beaumeade 230 kV breaker "274T2081" with		Daminian (1000/)
b2962.1	63kA breaker		Dominion (100%)
	Replace the NIVO 230 kV		
b2962.2	breaker "2116T2130" with		Dominion (100%)
	63kA breaker		` ,
	Reconductor the Woodbridge		
b2963	to Occoquan 230 kV line segment of Line #2001 with		
	1047 MVA conductor and		Dominion (100%)
02703	replace line terminal		Dominion (100%)
	equipment at Possum Point,		
	Woodbridge, and Occoquan		

Required Transmission Edinarcements - Annual Revenue Requirement	Load-Ratio Share
	Allocation:
	EC (1.71%) / AEP (14.04%)
	APS (5.61%) / ATSI (8.10%)
	/ BGE (4.36%) / ComEd
	13.14%) / Dayton (2.15%) /
	EOK (3.23%) / DL (1.73%)
	DPL (2.65%) / Dominion
	(13.03%) / EKPC (1.77%) /
	, , , , ,
	CPL (3.84%) / ME (1.93%) / EPTLINE* (0.45%) / ONEC
	EPTUNE* (0.45%) / OVEC
	(0.07%) / PECO (5.29%) /
P.	ENELEC (1.89%) / PEPCO
	(3.82%) / PPL (4.72%) /
P	PSEG (6.21%) / RE (0.26%)
	<b>DFAX Allocation:</b>
D 1 11111717171 1110	Dominion (100%)
Rebuild 115 kV Line #43	
between Staunton and	
b2980 Harrisonburg (22.8 miles)	Dominion (100%)
to current standards with a	_ (
summer emergency rating	
of 261 MVA at 115 kV	
Rebuild 115 kV Line #29	
segment between	
Fredericksburg and Aquia	
Harbor to current 230 kV	
standards (operating at 115	
b2981 kV) utilizing steel H-frame	Dominion (100%)
structures with 2-636	
ACSR to provide a normal	
continuous summer rating	
of 524 MVA at 115 kV	
(1047 MVA at 230 kV)	

<sup>\*</sup>Neptune Regional Transmission System, LLC

Required 11		Revenue Requirement	Responsible Customer(s)
b2989	Install a second 230/115 kV Transformer (224 MVA) approximately 1 mile north of Bremo and tie 230 kV Line #2028 (Bremo – Charlottesville) and 115 kV Line #91 (Bremo - Sherwood) together. A three breaker 230 kV ring bus will split Line #2028 into two lines and Line #91 will also be split into two lines with a new three breaker 115 kV ring bus. Install a temporary 230/115 kV transformer at Bremo substation for the interim until the new substation is complete		Dominion (100%)
b2990	Chesterfield to Basin 230 kV line – Replace 0.14 miles of 1109 ACAR with a conductor which will increase the line rating to approximately 706 MVA		Dominion (100%)
b2991	Chaparral to Locks 230 kV line – Replace breaker lead		Dominion (100%)
b2994	Acquire land and build a new switching station (Skippers) at the tap serving Brink DP with a 115 kV four breaker ring to split Line #130 and terminate the end points		Dominion (100%)
b3018	Rebuild Line #49 between New Road and Middleburg substations with single circuit steel structures to current 115 kV standards with a minimum summer emergency rating of 261 MVA		Dominion (100%)

required 110	ansimission Emiancements Amida	i Kevenue Kequitement	Responsible Customer(s)
			<b>Load-Ratio Share Allocation:</b>
			AEC (1.71%) / AEP (14.04%)
			/ APS (5.61%) / ATSI (8.10%)
			/ BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
			DEOK (3.23%) / DL (1.73%) /
			DPL (2.65%) / Dominion
b3019	Rebuild 500 kV Line #552		(13.03%) / EKPC (1.77%) /
	Bristers to Chancellor – 21.6		JCPL (3.84%) / ME (1.93%) /
	miles long		NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			Dominion (89.20%) / PEPCO
			(10.80%)
	Update the nameplate for		
b3019.1	Morrisville 500 kV breaker		Dominion (100%)
	"H1T594" to be 50kA Update the nameplate for		
b3019.2	Morrisville 500 kV breaker		Dominion (100%)
	"H1T545" to be 50kA		( /

Required 11	ansmission Enhancements Annual	Revenue Requirement	Responsible Customer(s)
			Load-Ratio Share Allocation:
			AEC (1.71%) / AEP (14.04%)
			/ APS (5.61%) / ATSI (8.10%)
			/ BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
			DEOK (3.23%) / DL (1.73%) /
			DPL (2.65%) / Dominion
			(13.03%) / EKPC (1.77%) /
	Rebuild 500 kV Line #574		JCPL (3.84%) / ME (1.93%) /
b3020	Ladysmith to Elmont – 26.2		NEPTUNE* (0.45%) / OVEC
	miles long		(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			APS (16.36%) / DEOK
			(11.61%) / Dominion (51.27%)
			/ EKPC (5.30%) / PEPCO
			(15.46%)
			<b>Load-Ratio Share Allocation:</b>
	Rebuild 500 kV Line #581 Ladysmith to Chancellor – 15.2 miles long		AEC (1.71%) / AEP (14.04%)
			/ APS (5.61%) / ATSI (8.10%)
			/ BGE (4.36%) / ComEd
			(13.14%) / Dayton (2.15%) /
			DEOK (3.23%) / DL (1.73%) /
			DPL (2.65%) / Dominion
1.2021			(13.03%) / EKPC (1.77%) /
b3021			JCPL (3.84%) / ME (1.93%) /
			NEPTUNE* (0.45%) / OVEC
			(0.07%) / PECO (5.29%) /
			PENELEC (1.89%) / PEPCO
			(3.82%) / PPL (4.72%) / PSEG
			(6.21%) / RE (0.26%)
			DFAX Allocation:
			Dominion (100%)
b3026	Reconductor Line #274 (Pleasant View – Ashburn – Beaumeade 230 kV) with a minimum rating of 1200 MVA. Also upgrade terminal equipment		Dominion (100%)
L			

		mae requirement responsible Customer(s)
b3027.1	Add a 2nd 500/230 kV 840 MVA transformer at Dominion's Ladysmith substation	Dominion (100%)
b3027.2	Reconductor 230 kV Line #2089 between Ladysmith and Ladysmith CT substations to increase the line rating from 1047 MVA to 1225 MVA	Dominion (100%)
b3027.3	Replace the Ladysmith 500 kV breaker "H1T581" with 50kA breaker	Dominion (100%)
b3027.4	Update the nameplate for Ladysmith 500 kV breaker "H1T575" to be 50kA breaker	Dominion (100%)
b3027.5	Update the nameplate for Ladysmith 500 kV breaker "568T574" (will be renumbered as "H2T568") to be 50kA breaker	Dominion (100%)
b3055	Install spare 230/69 kV transformer at Davis substation	Dominion (100%)
b3056	Partial rebuild 230 kV Line #2113 Waller to Lightfoot	Dominion (100%)
b3057	Rebuild 230 kV Lines #2154 and #19 Waller to Skiffes Creek	Dominion (100%)
b3058	Partial rebuild of 230 kV Lines #265, #200 and #2051	Dominion (100%)
b3059	Rebuild 230 kV Line #2173 Loudoun to Elklick	Dominion (100%)

required 11	ansimission Emianecticitis Amidai	Revenue Requirement	responsible Customer(s)
b3060	Rebuild 4.6 mile Elklick – Bull Run 230 kV Line #295 and the portion (3.85 miles) of the Clifton – Walney 230 kV Line #265 which shares structures with Line #295		Dominion (100%)
b3088	Rebuild 4.75 mile section of Line #26 between Lexington and Rockbridge with a minimum summer emergency rating of 261 MVA		Dominion (100%)
b3089	Rebuild 230 kV Line #224 between Lanexa and Northern Neck utilizing double circuit structures to current 230 kV standards. Only one circuit is to be installed on the structures with this project with a minimum summer emergency rating of 1047 MVA		Dominion (100%)
b3090	Convert the overhead portion (approx. 1500 feet) of 230 kV Lines #248 & #2023 to underground and convert Glebe substation to gas insulated substation		Dominion (100%)
b3096	Rebuild 230 kV line No.2063 (Clifton – Ox) and part of 230 kV line No.2164 (Clifton – Keene Mill) with double circuit steel structures using double circuit conductor at current 230 kV northern Virginia standards with a minimum rating of 1200 MVA		Dominion (100%)
b3097	Rebuild 4 miles of 115 kV Line #86 between Chesterfield and Centralia to current standards with a minimum summer emergency rating of 393 MVA		Dominion (100%)
b3098	Rebuild 9.8 miles of 115 kV Line #141 between Balcony Falls and Skimmer and 3.8 miles of 115 kV Line #28 between Balcony Falls and Cushaw to current standards with a minimum rating of 261 MVA		Dominion (100%)

110401100 111		Revenue Requirement	Responsible Customer(s)
b3098.1	Rebuild Balcony Falls 115 kV substation		Dominion (100%)
b3110.1	Rebuild Line #2008 between Loudoun to Dulles Junction using single circuit conductor at current 230 kV northern Virginia standards with minimum summer ratings of 1200 MVA. Cut and loop Line #265 (Clifton – Sully) into Bull Run substation. Add three (3) 230 kV breakers at Bull Run to accommodate the new line and upgrade the substation		Dominion (100%)
b3110.2	Replace the Bull Run 230 kV breakers "200T244" and "200T295" with 50 kA breakers		Dominion (100%)
b3113	Rebuild approximately 1 mile of 115 kV Lines #72 and #53 to current standards with a minimum summer emergency rating of 393 MVA. The resulting summer emergency rating of Line #72 segment from Brown Boveri to Bellwood is 180 MVA. There is no change to Line #53 ratings		Dominion (100%)
b3114	Rebuild the 18.6 mile section of 115 kV Line #81 which includes 1.7 miles of double circuit Line #81 and 230 kV Line #2056. This segment of Line #81 will be rebuilt to current standards with a minimum rating of 261 MVA. Line #2056 rating will not change		Dominion (100%)
b3121	Rebuild Clubhouse – Lakeview 230 kV Line #254 with single-circuit wood pole equivalent structures at the current 230 kV standard with a minimum rating of 1047 MVA		Dominion (100%)

1104011100 111		rte conde requirement	responsible editioner(s)
b3122	Rebuild Hathaway – Rocky Mount (Duke Energy Progress) 230 kV Line #2181 and Line #2058 with double circuit steel structures using double circuit conductor at current 230 kV standards with a minimum rating of 1047 MVA		Dominion (100%)
b3161.1	Split Chesterfield-Plaza 115 kV Line No. 72 by rebuilding the Brown Boveri tap line as double circuit loop in-and-out of the Brown Boveri Breaker station		Dominion (100%)
b3161.2	Install a 115 kV breaker at the Brown Boveri Breaker station. Site expansion is required to accommodate the new layout		Dominion (100%)
b3162	Acquire land and build a new 230 kV switching station (Stevensburg) with a 224 MVA, 230/115 kV transformer. Gordonsville-Remington 230 kV Line No. 2199 will be cut and connected to the new station. Remington-Mt. Run 115 kV Line No.70 and Mt. Run-Oak Green 115 kV Line No. 2 will also be cut and connected to the new station		Dominion (100%)
b3211	Rebuild the 1.3 mile section of 500 kV Line No. 569 (Loudoun – Morrisville) with single-circuit 500 kV structures at the current 500 kV standard. This will increase the rating of the line to 3424 MVA		Dominion (100%)
b3213	Install 2nd Chickahominy 500/230 kV transformer		Dominion (100%)

#### SCHEDULE 12 – APPENDIX A

# (23) American Transmission Systems, Inc.

Required '	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2019.2	Terminate Burger – Longview 138 kV, Burger – Brookside 138 kV, Burger – Cloverdale 138 kV #1, and Burger – Harmon 138 kV #2 into Holloway substation; Loop Burger – Harmon #1 138 kV and Burger – Knox 138 kV into Holloway substation		ATSI (100%)
b2019.3	Reconfigure Burger 138 kV substation to accommodate two 138 kV line exits and generation facilities		ATSI (100%)
b2019.4	Remove both Burger 138 kV substations (East and West 138 kV buses) and all 138 kV lines on the property		ATSI (100%)
b2019.5	Terminate and de- energize the 138 kV lines on the last structure before the Burger Plant property		ATSI (100%)
b2122.1	Reconductor the ATSI portion of the Howard – Brookside 138 kV line		ATSI (100%)
b2122.2	Upgrade terminal equipment at Brookside on the Howard – Brookside 138 kV line to achieve ratings of 252/291 (SN/SE)		ATSI (100%)
b2188	Revise the reclosing for the Bluebell 138 kV breaker '301-B-94'		ATSI (100%)
b2192	Replace the Longview 138 kV breaker '651-B-32'		ATSI (100%)
b2193	Replace the Lowellville 138 kV breaker '1-10-B 4'		ATSI (100%)

Required'	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2195	Replace the Roberts 138 kV breaker '601-B-60'		ATSI (100%)
b2196	Replace the Sammis 138 kV breaker '780-B-76'		ATSI (100%)
b2262	New Castle Generating Station – Relocate 138kV, 69kV, and 23kV controls from the generating station building to new control building		ATSI (100%)
b2263	Niles Generation Station – Relocate 138kV and 23kV controls from the generation station building to new control building		ATSI (100%)
b2265	Ashtabula Generating Station – Relocate 138kV controls from the generating station building to new control building		ATSI (100%)
b2284	Increase the design operating temperature on the Cloverdale – Barberton 138kV line		ATSI (100%)
b2285	Increase the design operating temperature on the Cloverdale – Star 138kV line		ATSI (100%)
b2301	Reconductor 0.7 miles of 605 ACSR conductor on the Beaver Black River 138kV line		ATSI (100%)
b2301.1	Wave trap and line drop replacement at Beaver (312/380 MVA SN/SE)		ATSI (100%)
b2349	Replace the East Springfield 138kV breaker 211-B-63 with 40kA		ATSI (100%)
b2367	Replace the East Akron 138kV breaker 36-B-46 with 40kA		ATSI (100%)

Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
Replace a relay at McDowell 138 kV substation		ATSI (100%)
Build a new London – Tangy 138 kV line		ATSI (100%)
Build a new East Springfield – London #2 138 kV line		Dayton (100%)
Install +260/-150 MVAR SVC at Lake Shore		ATSI (100%)
Replace the Beaver 138 kV breaker '426-B-2' with 63kA breaker		ATSI (100%)
Replace the Hoytdale 138kV breaker '83-B-30' with 63kA breaker		ATSI (100%)
At Avon substation, replace the existing 345/138 kV 448 MVA #92 transformer with a 560 MVA unit		ATSI (100%)
Close normally open switch A 13404 to create a Richland J Bus – Richland K Bus 138 kV line		ATSI (100%)
Reconductor the Black River – Lorain 138 kV line and upgrade Black River and Lorain substation terminal end equipment		ATSI (100%)
Construct a second 138 kV line between West Fremont and Hayes substation on open tower position of the West Fremont –Groton –Hayes 138 kV line		ATSI (100%)
Addition of 4th 345/138 kV transformer at Harding		ATSI (100%)
	Replace a relay at McDowell 138 kV substation  Build a new London — Tangy 138 kV line  Build a new East Springfield — London #2 138 kV line  Install +260/-150 MVAR SVC at Lake Shore  Replace the Beaver 138 kV breaker '426-B-2' with 63kA breaker  Replace the Hoytdale 138kV breaker '83-B-30' with 63kA breaker  At Avon substation, replace the existing 345/138 kV 448 MVA #92 transformer with a 560 MVA unit  Close normally open switch A 13404 to create a Richland J Bus — Richland K Bus 138 kV line  Reconductor the Black River — Lorain 138 kV line and upgrade Black River and Lorain substation terminal end equipment  Construct a second 138 kV line between West Fremont and Hayes substation on open tower position of the West Fremont —Groton —Hayes 138 kV line  Addition of 4th 345/138	Replace a relay at McDowell 138 kV substation  Build a new London — Tangy 138 kV line  Build a new East Springfield — London #2 138 kV line  Install +260/-150 MVAR SVC at Lake Shore  Replace the Beaver 138 kV breaker '426-B-2' with 63kA breaker  Replace the Hoytdale 138kV breaker '83-B-30' with 63kA breaker  At Avon substation, replace the existing 345/138 kV 448 MVA #92 transformer with a 560 MVA unit  Close normally open switch A 13404 to create a Richland J Bus — Richland K Bus 138 kV line  Reconductor the Black River — Lorain 138 kV line and upgrade Black River and Lorain substation terminal end equipment  Construct a second 138 kV line between West Fremont and Hayes substation on open tower position of the West Fremont —Groton —Hayes 138 kV line  Addition of 4th 345/138

Required	Fransmission Enhancements .	Annual Revenue Requirement	Responsible Customer(s)
b2673	Rebuild the existing double circuit tower line section from Beaver substation to Brownhelm Jct. approx.  2.8 miles		ATSI (100%)
b2674	Rebuild the 6.6 miles of Evergreen to Ivanhoe 138 kV circuit with 477 ACSS conductor		ATSI (100%)
b2675	Install 26.4 MVAR capacitor and associated terminal equipment at Lincoln Park 138 kV substation		ATSI (100%)
b2725	Build new 345/138 kV Lake Avenue substation w/breaker and a half high side (2 strings), 2-345/138 kV transformers and breaker and a half (2 strings) low side (138 kV). Substation will tie Avon – Beaver 345 kV #1/#2 and Black River – Johnson #1/#2 lines		ATSI (100%)
b2725.1	Replace the Murray 138 kV breaker '453-B-4' with 40kA breaker		ATSI (100%)
b2742	Replace the Hoytdale 138 kV '83-B-26' and '83-B- 30' breakers with 63kA breakers		ATSI (100%)
b2753.4	Double capacity for 6 wire "Burger-Cloverdale No. 2" 138 kV line and connect at Holloway and "Point A"		ATSI (100%)
b2753.5	Double capacity for 6 wire "Burger-Longview" 138 kV line and connect at Holloway and "Point A"		ATSI (100%)
b2778	Add 2nd 345/138 kV transformer at Chamberlin substation		ATSI (100%)
b2780	Replace Bruce Mansfield 345 kV breaker 'B57' with an 80 kA breaker, and associated gang-operated disconnect switches D56 and D58		ATSI (100%)

rtequirea	Tansinission Linancements A	iniuai Revenue Requirement	responsible Customer(s)
b2869	Replace the Crossland 138 kV breaker "B-16" with a 40kA breaker		ATSI (100%)
b2875	Relocate the Richland to Ridgeville 138 kV line from Richland J bus to K, extend the K bus and install a new breaker		ATSI (100%)
b2896	Rebuild/Reconductor the Black River – Lorain 138 kV circuit		ATSI (100%)
b2897	Reconductor the Avon – Lorain 138 kV section and upgrade line drop at Avon		ATSI (100%)
b2898	Reconductor the Beaver – Black River 138 kV with 954Kcmil ACSS conductor and upgrade terminal equipment on both stations		ATSI (100%)
b2942.1	Install a 100 MVAR 345 kV shunt reactor at Hayes substation		ATSI (100%)
b2942.2	Install a 200 MVAR 345 kV shunt reactor at Bayshore substation		ATSI (100%)
b2972	Reconductor limiting span of Lallendorf – Monroe 345 kV		MISO (11.00%) / AEP (5.38%) / APS (4.27%) / ATSI (66.48%) / Dayton (2.71%) / Dominion (5.31%) / DL (4.85%)
b3031	Transfer load off of the Leroy Center - Mayfield Q2 138 kV line by reconfiguring the Pawnee substation primary source, via the existing switches, from the Leroy Center - Mayfield Q2 138 kV line to the Leroy Center - Mayfield Q1 138 kV line		ATSI (100%)

Required	Transmission Enhancements	Allitual Revenue Requiremen	it Responsible Customer(s)
b3032	Greenfield - NASA 138 kV terminal upgrades: NASA substation, Greenfield exit: Revise CT tap on breaker B22 and adjust line relay settings; Greenfield substation, NASA exit: Revise CT tap on breaker B1 and adjust line relay settings; replace 336.4 ACSR line drop with 1033.5 AL		ATSI (100%)
b3033	Ottawa – Lakeview 138 kV reconductor and substation upgrades		ATSI (100%)
b3034	Lakeview – Greenfield 138 kV reconductor and substation upgrades		ATSI (100%).
b3066	Reconductor the Cranberry  – Jackson 138 kV line (2.1 miles), reconductor 138 kV bus at Cranberry bus and replace 138 kV line switches at Jackson bus		ATSI (100%)
b3067	Reconductor the Jackson – Maple 138 kV line (4.7 miles), replace line switches at Jackson 138 kV and replace the line traps and relays at Maple 138 kV bus		ATSI (100%)
b3080	Reconductor the 138 kV bus at Seneca		ATSI (100%)
b3081	Replace the 138 kV breaker and reconductor the 138 kV bus at Krendale		ATSI (100%)
b3124	Separate metering, station power, and communication at Bruce Mansfield 345 kV station		ATSI (100%)

ł	53127	At Bay Shore 138 kV station: Install new switchyard power supply to separate from existing generating station power service, separate all communications circuits,	ATSI (100%)
		and construct a new station access road	
ł	o3152	Reconductor the 8.4 mile section of the Leroy Center – Mayfield Q1 line between Leroy Center and Pawnee Tap to achieve a rating of at least 160 MVA / 192 MVA (SN/SE)	ATSI (100%)

#### SCHEDULE 12 – APPENDIX A

# (24) Duke Energy Ohio and Duke Energy Kentucky

Required T	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Revising the reclosing of		
b2278	Charles 138kV breaker '919'		DEOK (100%)
	to 15 sec		
1.0451	Replace the Charles 138 kV		DEOK (100%)
b2451	breaker '919' with 63 kA		DEOK (100%)
	Add two breakers at Miami		
	Fort 138 kV; Interim		
	solution to violation driven		
b2564	by Beckjord GTs		DEOK (100%)
	deactivations is to lower		
	generation at Miami Fort to		
	120 MW		
	Convert Miami Fort 345 kV		
	substation to a ring bus		
b2634	terminating Feeder 4504,		DEOK (100%)
	TB 9 and TB 10 in separate		
	ring positions		
b2828	Install 5% reactors at Miami		DEOK (100%)
02828	Fort 138 kV to limit current		DEOK (100%)
	Reconductor feeder from		
b2829	Port Union to East		DEOK (100%)
02029	Provident 138 kV line for		DLOK (100%)
	300MVA		
	Expand Garver 345 kV		
	substation to include 138		
	kV. Install 1-345 kV		
	breaker, 1-345/138 kV 400		
b2830	MVA transformer, 6-138		DEOK (100%)
	kV Breakers and bus work.		
	Connect local 138 kV		
	circuits from Todhunter,		
	Rockies Express, and Union		
b2831.2	Upgrade the Tanner Creek -		<b>DFAX Allocation:</b>
	Miami Fort 345 kV circuit		Dayton (61.71%) / DEOK
	(DEOK portion)		(37.68%) / OVEC (0.61%)
	Replace Todhunter 138 kV		
b2894	breakers '931', '919', and		DEOK (100%)
	'913' with 80 kA breakers		

# **Duke Energy Ohio and Duke Energy Kentucky (cont.)**

Required T	ransmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
	Replace Dicks Creek 138		
b2895	kV breaker '963' with 63		DEOK (100%)
	kA breaker		
	Reconductor the Port Union		
	– Mulhauser 138 kV line		
b2901	with 954 ASCR bringing the		DEOK (100%)
	summer ratings to		` '
	A/B/C=300/300/300 MVA		
b2977	Portion of 2017_1-6A		DEOK (100%)
	Install a new 345 kV		
	breaker "1422" so Pierce		
1.2077 1	345/138 kV transformer #18		DEOK (1000/)
b2977.1	is now fed in a double		DEOK (100%)
	breaker, double bus		
	configuration		
	Remove X-533 No. 2 to the		
L2077.2	first tower outside the		DEOK (100%)
b2977.2	station. Install a new first		DEOK (100%)
	tower for X-533 No. 2		
	Install a new 345 kV		
	breaker B and move the		
	Buffington – Pierce 345 kV		
b2977.3	feeder to the B-C junction.		DEOK (100%)
02911.3	Install a new tower at the		DEOK (100%)
	first tower outside the		
	station for Buffington –		
	Pierce 345 kV line		
	Remove breaker A and		
b2977.4	move the Pierce 345/138 kV		DEOV (100%)
02977.4	transformer #17 feed to the		DEOK (100%)
	C-D junction		
	Replace breaker 822 at		
b2977.5	Beckjord 138 kV substation		
	to increase the rating from		DEOK (100%)
	Pierce to Beckjord 138 kV		
	to 603MVA		
b3048	Replace 138 kV breakers		
	937, 941 and 945 at		DEOK (100%)
	Todhunter station		
b3050	Install redundant relay to		DEOK (100%)
	Port Union 138 kV Bus #2		DEOR (100%)