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June 15, 2026

Honorable Debbie-Anne Reese, Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1A
Washington, DC 20426

Re: *PJM Interconnection, L.L.C., Docket No. ER26-1800-001*
Compliance Filing

Dear Secretary Reese:

In compliance with the Federal Energy Regulatory Commission's ("Commission") directive of the May 15, 2026, Order on Tariff Revisions,[1] PJM Interconnection, L.L.C. ("PJM") hereby submits revised cost responsibility assignments for the project additions and modifications in the recent update to the Regional Transmission Expansion Plan ("RTEP") approved by the PJM Board of Managers ("PJM Board") on February 12, 2026 (the "February RTEP Projects"), in Schedule 12-Appendix A of the PJM Open Access Transmission Tariff ("Tariff"). As directed, PJM determined the revised cost responsibility assignments by applying the solution-based distribution factor ("DFAX") method after removing the *de minimis* threshold exemption.

To facilitate orderly management of Tariff, Schedule 12-Appendix A, PJM requests that the Commission act expeditiously on this compliance filing. Expeditious action would allow for the correct Schedule 12-Appendix A tariff records to be in place, effective

[1] *PJM Interconnection, L.L.C.*, 195 FERC ¶ 61,118 (2026) ("Order on Tariff Revisions").

June 14, 2026, for future revisions to Schedule 12-Appendix A and to minimize the need for cleanup filings.[2]

I. BACKGROUND

On March 16, 2026, PJM submitted revisions to Tariff, Schedule 12-Appendix A to provide the cost responsibility assignments for the February RTEP Projects, effective June 14, 2026.[3] On May 15, 2026, the Commission issued its Order on Tariff Revisions accepting the revised Tariff, Schedule 12-Appendix A records, effective June 14, 2026.[4] However, the Commission directed PJM to submit a compliance filing within thirty days of the Order on Tariff Revisions to update the cost responsibility of assignments for the February RTEP Projects to reflect the Commission's directive in the Order on Remand "to eliminate the *de minimis* threshold exemption in the calculation of cost responsibility assignments."[5]

II. COMPLIANCE REVISIONS

In compliance with the Commission's Order on Tariff Revisions, PJM submits revisions to Schedule 12-Appendix A to present cost responsibility assignments for the

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[2] In preparation of this filing, PJM discovered a typo in the Schedule 12-Appendix A, section 10 (Potomac Electric Power Company) tariff record included in the March 16 Filing. PJM mistakenly added project b4053.29 as b4052.29. Since project b4053.29 and its associated cost responsibility assignment had been correctly included in the summary sheets provided in Attachment A to the March 16 Filing, which the Commission accepted, PJM revised Tariff, Schedule 12-Appendix A to rectify this discrepancy and provide the revised cost allocation assignment for project b4053.29.

[3] *See PJM Interconnection, L.L.C.*, Docket No. ER26-1800-000, Revisions to Incorporate Cost Responsibility Assignments for Regional Transmission Expansion Plan Baseline Upgrades (Mar. 16, 2026) ("March 16 Filing").

[4] Order on Tariff Revisions at P 19.

[5] *See* Order on Tariff Revisions at P 19; *see also Consol. Edison Co. of N.Y., Inc. v. PJM Interconnection, L.L.C.*, 194 FERC ¶ 61,179, at ordering paras. (E) & (F) (2026) ("Order on Remand"); *PJM Interconnection, L.L.C.*, Notice of Extension of Time, Docket Nos. EL15-18-006, et al., at 2 (Apr. 29, 2026) ("Notice of Extension").

February RTEP Projects using the solution-based DFAX method without application of the *de minimis* threshold exemption.

III. EFFECTIVE DATE

PJM requests that the revised cost responsibility assignments reflected in the enclosed Tariff, Schedule 12-Appendix A records become effective June 14, 2026, consistent with the Commission's Order on Tariff Revisions.[6]

IV. REQUEST FOR EXPEDITED ACTION

PJM respectfully requests that the Commission issue an order accepting this compliance filing in an expedited manner. Expedited action will allow the enclosed tariff records to be in place, effective June 14, 2026, and will allow PJM to build on such corrected Tariff records in submitting future revisions to Tariff, Schedule 12-Appendix A. For instance, in Docket No. ER26-2737-000, PJM submitted revisions to Schedule 12-Appendix and Schedule 12-Appendix A in compliance with the Commission's Order on Remand to become effective June 1, 2026, and also requested expedited Commission approval.[7] PJM will need to submit a clean-up filing after Commission acceptance of the June 4 Compliance Filing and this filing to merge the revised cost responsibility assignments accepted in both proceedings. Expedited Commission action on this filing

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[6] *See* Order on Tariff Revisions at P 19 ("We accept PJM's proposed Tariff revisions to Schedule 12-Appendix A to incorporate cost responsibility assignments for the transmission additions and modifications in the recent update to the RTEP, as approved by the PJM Board, effective June 14, 2026, as requested."). To the extent necessary, PJM respectfully requests waiver of any applicable prior notice requirements to permit the Tariff revisions proposed herein to become effective on June 14, 2026.

[7] *PJM Interconnection L.L.C.*, Compliance Filing and Request for Expedited Action, Docket No. ER26-2737-000 (June 4, 2026) ("June 4 Compliance Filing") (updating, on a prospective basis, cost responsibility assignments for RTEP projects that are in-service or scheduled to go into service in 2026 based on the elimination of the *de minimis* threshold exemption to the solution-based DFAX methodology).

would also allow PJM to have correct base Tariff records in place for the next time the PJM Board includes new projects in the RTEP and PJM revises Schedule 12-Appendix A to include such new projects and their cost responsibility assignments.

V. DOCUMENTS ENCLOSED

PJM encloses the following documents with this filing:

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

VI. CORRESPONDENCE AND COMMUNICATIONS

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

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VII. 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,[8] PJM will post a copy of this filing to the FERC filings section of its internet site, located at the following link: https://www.pjm.com/library/filing-order 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[9] alerting them that this filing has been made by PJM and is available by following such link. If the document is not immediately available by using the referenced link, the document will be available through the referenced link within 24 hours of the filing. Also, a copy of this filing will be available on the Commission's eLibrary website located at the following link: https://www.ferc.gov/ferc-online/elibrary in accordance with the Commission's regulations and Order No. 714.[10]

[8] 18 C.F.R. §§ 35.2(e) & 385.201(f)(3).

[9] PJM already maintains, updates, and regularly uses email lists for all PJM Members and affected state commissions.

[10] *Electronic Tariff Filings*, Order No. 714, 124 FERC ¶ 61,270 (2008), *order on clarification*, Order No. 714-A, 147 FERC ¶ 61,115 (2014).

VIII. CONCLUSION

For the reasons set forth above, PJM respectfully requests that the Commission expeditiously accept the enclosed Tariff revisions effective June 14, 2026.

Respectfully submitted,

/s/ Sigifredo Perez

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June 15, 2026

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C., this 15th day of June 2026

/s/ Sigifredo Perez
Sigifredo Perez

Attorney for
PJM Interconnection, L.L.C.

Attachment A

Revised sections of Tariff, Schedule 12-Appendix A (in marked form)

SCHEDULE 12 – APPENDIX A

(4) Jersey Central Power & Light Company

Required Transmission 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 230 kV Substation		JCPL (100%)
b2271	Advance Raritan River - Replace G1047F breaker at the 230 kV Substation		JCPL (100%)
b2272	Advance Raritan River - Replace T1034E breaker at the 230 kV Substation		JCPL (100%)
b2273	Advance Raritan River - Replace T1034F breaker at the 230 kV Substation		JCPL (100%)
b2274	Advance Raritan River - Replace I1023E breaker at the 230 kV Substation		JCPL (100%)
b2275	Advance Raritan River - Replace I1023F breaker at the 230 kV 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 63 kA breaker		JCPL (100%)
b2357	Replace the East Windsor 230 kV breaker 'E1' with 63 kA breaker		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2495	Replace transformer leads on the Glen Gardner 230/34.5 kV #1 transformer		JCPL (100%)
b2496	Replace Franklin 115/34.5 kV transformer #2 with 90 MVA transformer		JCPL (100%)
b2497	Reconductor 0.9 miles of the Captive Plastics to Morris Park 34.5 kV circuit (397ACSR) with 556 ACSR		JCPL (100%)
b2498	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		JCPL (100%)
b2500	Upgrade terminal equipment at Monroe on the Englishtown to Monroe (H34) 34.5 kV circuit		JCPL (100%)
b2570	Upgrade limiting terminal facilities at Feneau, Parlin, and Williams substations		JCPL (100%)
b2571	Upgrade the limiting terminal facilities at both Jackson and North Hanover		JCPL (100%)
b2586	Upgrade the V74 34.5 kV transmission line between Allenhurst and Elberon Substations		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2633.6	Implement high speed relaying utilizing OPGW on Deans – East Windsor 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)
b2633.6.1	Implement high speed relaying utilizing OPGW on East Windsor - New Freedom 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)

* Neptune Regional Transmission System, LLC

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual 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 40 kA breakers		JCPL (100%)
b3042	Replace substation conductor at Raritan River 230 kV substation on the Kilmer line terminal		JCPL (100%)

Jersey Central Power & Light Company (cont.)

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

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3130.11	Replace four Atlantic 34.5 kV breakers (BK1A, BK1B, BK3A and BK3B) with 63 kA rated breakers and associated equipment		JCPL (100%)
b3130.12	Replace six Werner 34.5 kV breakers (E31A_Prelim, E31B_Prelim, V48 future, W101, M39 and U99) with 40 kA rated breakers and associated equipment		JCPL (100%)
b3238	Replace seven (7) overdutied 34.5 kV breakers with 50 kA rated equipment at the Whippany substation		JCPL (100%)
b3239	Replace fourteen (14) overdutied 34.5 kV breakers with 63 kA rated equipment		JCPL (100%)
b3674	Replace five Atlantic 34.5 kV breakers (J36, BK1A, BK1B, BK3A and BK3B) with 63 kA rated breakers and associated equipment		JCPL (100%)
b3675	Replace six Werner 34.5 kV breakers (E31A_Prelim, E31B_Prelim, V48 future, W101, M39 and U99) with 40 kA rated breakers and associated equipment		JCPL (100%)
b3676	Replace Freneau 34.5 kV breaker (BK6) with 63 kA rated breakers and associated equipment		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3860.1	Replace the 34.5 kV bus tie breaker at Chester Substation with a new 34.5 kV breaker that has an interruption capability of 40 kA		JCPL (100%)
b3861.1	Replace the W101 34.5 kV breaker at Werner Substation with a new 34.5 kV breaker that has an interruption capability of 40 kA		JCPL (100%)
b3986.1	Replace 14 Windsor 34.5 kV breakers.		JCPL (100%)
b3987.1	Replace East Flemington 34.5 kV circuit breakers C731, V724, A729, TC, H736, AV, YH and Y727 with 40 kA, 3000A breakers.		JCPL (100%)
b4013.1	Install a 10.8 MVAR capacitor at Colts Neck 34.5 kV substation.		JCPL (100%)
b4014.1	Install a 34.5 kV Capacitor at Sussex substation.		JCPL (100%)
b4015.1	At Long Branch substation replace the 34.5 kV line terminal switch.		JCPL (100%)
b4016.1	Rebuild the Jamesburg-Monroe 34.5 kV N40 line from Jamesburg substation to Monroe Junction substation, approximately 1.2 miles.		JCPL (100%)
b4016.2	Replace limiting conductor and revise relay settings at Monroe substation.		JCPL (100%)
b4016.3	Install new relay and revise relay settings at Costco substation.		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4016.4	Rebuild a section of the Englishtown-Monroe Junction 34.5 kV H34 line that is mutual with the Costco-Monroe Junction 34.5 kV N40 line near Monroe Junction substation, approximately 0.4 miles.		JCPL (100%)
b4017.1	Upgrade line relaying at Van Hiseville substation.		JCPL (100%)
b4017.2	Rebuild Great Adventure 34.5 kV substation as an eleven-breaker, breaker-and-a-half station.		JCPL (100%)
b4017.3	Upgrade line relaying at Windsor substation.		JCPL (100%)
b4017.4	Rebuild the Cookstown-Windsor 34.5 kV H60 line from Cookstown substation to Str No. 58 as a double circuit, approximately 4.7 miles. Terminate new line into Cookstown substation.		JCPL (100%)
b4017.5	Rebuild the Cookstown-Van Hiseville 34.5 kV V22 line from Str No. 91445 to Greater Adventure substation as a double circuit, approximately 5.2 miles.		JCPL (100%)
b4017.6	At Cookstown substation, replace 34.5 kV breaker, two disconnect switches, relaying and ancillary terminal equipment.		JCPL (100%)
b4018.1	Purchase land needed to support construction of new 34.5 kV switching station.		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4018.2	Replace line relaying at South Lakewood substation.		JCPL (100%)
b4018.3	Terminate 34.5 kV lines to new 34.5 kV ring bus station. Change drawings and nameplates for new line terminal names.		JCPL (100%)
b4018.4	Replace limiting conductor at Larrabee substation.		JCPL (100%)
b4018.5	Remove equipment and add breakers and switches at Metedeconk substation. Remove equipment to isolate transformers.		JCPL (100%)
b4018.6	Replace line relaying at Leisure Village substation.		JCPL (100%)
b4018.7	Reconfigure 34.5 kV switchyard at Metedeconk substation to a breaker-and-a-half yard.		JCPL (100%)
b4018.8	Build a new 34.5 kV ring bus switching station (Adjacent to Vermont Avenue substation).		JCPL (100%)
b4018.9	Loop the Leisure Village-South Lakewood 34.5 kV F214 line into the new 34.5 kV ring bus station, approximately 0.1 miles.		JCPL (100%)
b4018.10	Install new hardware and wire on the Herbertsville - Larrabee 34.5 kV Q43 line to support the rebuild project of approximately 2.6 miles.		JCPL (100%)
b4018.11	Install new hardware and wire on the Larrabee - Point Pleasant No. 2 34.5 kV R44 line to support the rebuild project, approximately 2.6 miles.		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4018.12	Install a new tie line (circuit 1) from the existing Vermont Avenue substation to the new 34.5 kV ring bus station, approximately 0.1 miles.		JCPL (100%)
b4018.13	Install a new tie line (circuit 2) from the existing Vermont Avenue Substation to the new 34.5 kV ring bus station, approximately 0.1 miles.		JCPL (100%)
b4032.1	Install a 500 kV double-breaker double-bus at Montville substation Install a 500/230 kV transformer and 500 kV breaker. Install new breaker string in the 230 kV yard to create a breaker-and-a-half layout. Reterminate the 230-34.5 kV transformers.		AEC (0.35%) / APS (0.23%) / DPL (0.30%) / JCPL (4~~20~~.~~72~~38%) / ME (1.13%) / NEPTUNE* (1.60%) / PECO (1.46%) / PENELEC (0.41%) / PSEG (5~~52~~.2~~47~~%) / RE (1~~2~~.9~~01~~%)
b4032.2	Replace the 2-pole wood structure No. 154 on the Montville-Whippany 34.5 kV, K115 line with a monopole and UG riser. Install approximately 200 ft. of new UG conductor to be spliced with existing section of UG conductor into Montville substation.		AEC (0.52%) / DPL (0.61%) / JCPL (~~100~~82.56%) / ME (0.17%) / NEPTUNE* (3.17%) / PECO (2.27%) / PSEG (10.33%) / RE (0.37%)

* Neptune Regional Transmission System, LLC

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4032.3	Replace the 2-pole wood structure No. 154 on the Montville-Whippany 34.5 kV O93 line with a monopole UG riser and install approximately 200 ft. of new UG conductor to be spliced with existing section of UG conductor into the Montville substation.		AEC (0.43%) / DPL (0.51%) / JCPL (~~100~~84.97%) / ME (0.14%) / NEPTUNE* (2.66%) / PECO (1.89%) / PSEG (9.07%) / RE (0.33%)

* Neptune Regional Transmission System, LLC

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4042.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5DYN-JCPL03.		JCPL (100%)
b4043.1	2024W1 P5: Modify relay wiring: Addressing FG No. 2024-P5-JCPL06.		JCPL (100%)
b4045.1	2024W1 P5: Install relay panel and modify relay wiring: Addressing FG No. 2024-P5-JCPL01.		JCPL (100%)
b4046.1	2024W1 P5: Install battery monitoring, DC panel, and modify relay wiring: Addressing FG No. 2024-P5DYN-JCPL04.		JCPL (100%)
b4047.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5-JCPL03.		JCPL (100%)
b4049.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5DYN-JCPL02.		JCPL (100%)
b4067.1	2024W1 P5: Install battery monitoring, DC panel, and modify relay wiring: Addressing FG No. 2024-P5DYN-JCPL01.		JCPL (100%)

SCHEDULE 12 – APPENDIX A

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

Required Transmission Enhancements		Annual Revenue Requirement	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 40 kA breaker		PENELEC (100%)
b2294	Replace the Johnstown 115 kV breaker 'Bon Aire' with 40 kA breaker		PENELEC (100%)
b2302	Replace the Erie South 115 kV breaker 'French #2' with 40 kA 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%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2494	Construct Warren 230 kV ring bus and install a second Warren 230/115 kV transformer		PENELEC (100%)
b2552.1	Reconductor the North Meshoppen – Oxbow-Lackawanna 230 kV circuit and upgrade terminal equipment (MAIT portion)		PENELEC (100%)
b2573	Replace the Warren 115 kV 'B12' breaker with a 40 kA breaker		PENELEC (100%)
b2587	Reconfigure Pierce Brook 345 kV station to a ring bus and install a 125 MVAR shunt reactor at the station		PENELEC (100%)
b2621	Replace relays at East Towanda and East Sayre 115 kV substations (158/191 MVA SN/SE)		PENELEC (100%)
b2677	Replace wave trap, bus conductor and relay at Hilltop 115 kV substation. Replace relays at Prospect and Cooper substations		PENELEC (100%)
b2678	Convert the East Towanda 115 kV substation to breaker and half configuration		PENELEC (100%)
b2679	Install a 115 kV Venango Jct. line breaker at Edinboro South		PENELEC (100%)
b2680	Install a 115 kV breaker on Hooversville #1 115/23 kV transformer		PENELEC (100%)
b2681	Install a 115 kV breaker on the Eclipse #2 115/34.5 kV transformer		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	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 40 kA breaker		PENELEC (100%)
b2736	Replace the Warren 115 kV 'Warren #1' breaker with 40 kA breaker		PENELEC (100%)
b2737	Replace the Warren 115 kV 'A TX #1' breaker with 40 kA breaker		PENELEC (100%)
b2738	Replace the Warren 115 kV 'A TX #2' breaker with 40 kA breaker		PENELEC (100%)
b2739	Replace the Warren 115 kV 'Warren #2' breaker with 40 kA 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%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual 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%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2806	Install a new relay and replace meter at the Raystown 46 kV substation, on the Raystown – Smithfield 46 kV circuit		PENELEC (100%)
b2807	Replace the CHPV and CRS relay, and adjust the IAC overcurrent relay trip setting; or replace the relay at Eldorado 46 kV substation, on the Eldorado – Gallitzin 46 kV circuit		PENELEC (100%)
b2808	Adjust the JBC overcurrent relay trip setting at Raystown 46 kV, and replace relay and 4/0 CU bus conductor at Huntingdon 46 kV substations, on the Raystown – Huntingdon 46 kV circuit		PENELEC (100%)
b2865	Replace Seward 115 kV breaker "Jackson Road" with 63 kA breaker		PENELEC (100%)
b2866	Replace Seward 115 kV breaker "Conemaugh N." with 63 kA breaker		PENELEC (100%)
b2867	Replace Seward 115 kV breaker "Conemaugh S." with 63 kA breaker		PENELEC (100%)
b2868	Replace Seward 115 kV breaker "No.8 Xfmr" with 63 kA breaker		PENELEC (100%)
b2944	Install two 345 kV 80 MVAR shunt reactors at Mainesburg station		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual 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 50 kA breaker		PENELEC (100%)
b2954	Replace the Keystone 500 kV breaker "NO. 16 Cabot" with 50 kA 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%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

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

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual 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. Replace bus conductor		PENELEC (100%)
b3043	Install one 115 kV 36 MVAR capacitor at West Fall 115 kV substation		PENELEC (100%)
b3073	Replace the Blairsville East 138/115 kV transformer and associated equipment such as breaker disconnects and bus conductor		PENELEC (100%)
b3077	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%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3231	Replace the existing No. 2 cap bank breaker at Huntingdon substation with a new breaker with higher interrupting capability		PENELEC (100%)
b3232	Replace the existing Williamsburg, ALH (Hollidaysburg) and bus section breaker at the Altoona substation with a new breaker with higher interrupting capability		PENELEC (100%)
b3233	Install one (1) 34 MVAR 115 kV shunt reactor and breaker. Install one (1) 115 kV circuit breaker to expand the substation to a 4-breaker ring bus		PENELEC (100%)
b3237	Install two (2) 46 kV 6.12 MVAR capacitors effective at Mt. Union		PENELEC (100%)
b3245	Construct a new breaker-and-a-half substation near Tiffany substation. All transmission assets and lines will be relocated to the new substation. The two (2) distribution transformers will be fed via two (2) dedicated 115 kV feeds to the existing Tiffany substation		PENELEC (100%)
b3306	Install a second 125 MVAR 345 kV shunt reactor and associated equipment at Pierce Brook substation. Install a 345 kV breaker on the high side of the 345/230 kV transformer #1		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3665	Replace several pieces of 1033.5 AAC substation conductor at East Towanda 230 kV station on East Towanda - Canyon 230 kV line		PENELEC (100%)
b3666	Install dual reactors and expand existing ring bus at Marshall 230 kV substation		PENELEC (100%)
b3667	Install second 230/115 kV transformer at Pierce Brook substation		PENELEC (100%)
b3672	Rebuild 2.5 miles of East Towanda-North Meshoppen 115 kV line with 1113 ACSS conductor using single circuit construction. Upgrade all terminal equipment to the rating of 1113 ACSS		PENELEC (100%)
b3673	Replace the relay panels at Bethlehem 33 46 kV substation on the Cambria Prison line		PENELEC (100%)
b3708	Replace the Shawville 230/115/17.2 kV transformer with a new Shawville 230/115 kV transformer and associated facilities. Replace the plant's No. 2B 115/17.2 kV transformer with a larger 230/17.2 kV transformer		PENELEC (100%)
b3750	Upgrade Seward terminal equipment of Seward – Blairsville 115 kV line to increase the line rating such that the transmission line conductor is the limiting component		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3751	Rebuild 6.4 miles of Roxbury – Shade Gap 115 kV line from Roxbury to the AE1-071 115 kV ring bus with single circuit 115 kV construction		PENELEC (100%)
b3752	Rebuild 7.2 miles of the Shade Gap – AE1-071 115 kV line section of the Roxbury – Shade Gap 115 kV line		PENELEC (100%)
b3753	Replace the Tyrone North 115 /46 kV transformer with a new standard 75 MVA top rated bank and upgrade the entire terminal to minimum 100 MVA capability for both SN and SE rating		PENELEC (100%)
b3754	Construct a new three breaker ring bus to tie into the Warrior Ridge - Belleville 46 kV D line and the 1LK line at Maclane Tap		PENELEC (100%)
b3765	Purchase one 80 MVAR 345 kV spare reactor, to be located at the Mainesburg 345 kV station		PENELEC (100%)
b3783	Cut and remove the 345 kV and 230 kV generator lead lines at Homer City station. Install new station service supply, separate AC station service, separate protection and controls schemes, and review and adjust relay protection settings		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3791.0	Rebuild the North Meshoppen - Mehoopany No. 1 115 kV line with 795 ACSR 26/7 STR conductor. Upgrade terminal equipment to exceed transmission line ratings		PENELEC (100%)
b3792.0	Rebuild the North Meshoppen - Mehoopany No. 2 115 kV line using 795 ACSR 26/7 STR conductor, and upgrade terminal equipment to exceed the transmission line rating		PENELEC (100%)
b4008.1	2024W1 P5: Install open-battery monitoring and modify relay wiring: Addressing FG No. 2024-P5DYN-PN01		PENELEC (100%)
b4009.1	2024W1 P5: Modify relay wiring: Addressing FG No. 2024-P5-PN03		PENELEC (100%)
b4010.1	2024W1 P5: Install open-battery monitoring and modify relay wiring: Addressing FG No. 2024-P5DYN-PN05		PENELEC (100%)
b4012.1	Belleville-Center Union 46 kV line – Replace structures and use 795 ACSR 26/7 conductor on spans D-356 through D-360		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.1	Upgrade Keystone terminal of Keystone - South Bend 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.04%) / AEP (0.36%) / APS (2.13%) / ATSI (11.52%) / BGE (12.47%) / ComEd (0.99%) / Dayton (0.21%) / DEOK (0.32%) / DL (0.42%) / Dominion (2.48%) / DPL (4.33%) / EKPC (0.08%) / JCPL (6.39%) / ME (1.27%) / NEPTUNE* (0.68%) / PECO (0.12%) / PENELEC (1.05%) / PEPCO (0.26%) / PPL (43.08%) / PSEG (11.38%) / RE (0.42%)~~APS (5.36%) / DL (1.06%) / PENELEC (2.23%) / PPL (91.35%)~~

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.3	Upgrade Keystone terminal of Keystone - Juniata 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (3.06%) / AEP (1.54%) / Dayton (0.50%) / DEOK (1.31%) / Dominion (5.70%) / DPL (2.76%) / EKPC (0.80%) / JCPL (10.41%) / ME (6.83%) / NEPTUNE* (1.13%) / PECO (11.62%) / PEPCO (4.73%) / PPL (32.94%) / PSEG (16.09%) / RE (0.58%)~~AEC (3.70%) / JCPL (12.60%) / ME (8.26%) / Neptune (1.36%) / PECO (14.05%) / PPL (39.85%) / PSEG (19.47%) / RE (0.71%)~~

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4036.19	Replace nine 500 kV circuit breakers at Conemaugh 500 kV substation with new 63 kA, 5000A breakers	PENELEC (100%)

~~*Neptune Regional Transmission System, LLC~~

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.20	Transmission line Work: Loop in Keystone - Conemaugh 500 kV into Buttermilk Falls - Establish Keystone - Buttermilk Falls		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (4.51%) / AEP (0.21%) / APS (0.68%) / ATSI (0.67%) / BGE (0.11%) / Dayton (0.05%) / DEOK (0.06%) / DL (0.36%) / Dominion (9.39%) / DPL (7.27%) / EKPC (0.01%) / JCPL (9.33%) / ME (4.18%) / NEPTUNE* (1.00%) / OVEC (0.02%) / PECO (17.05%) / PENELEC (0.07%) / PEPCO (11.25%) / PPL (22.28%) / PSEG (11.10%) / RE (0.40%)~~APS (0.85%) / ATSI (0.84%) / DL (0.44%) / PECO (32.96%) / PENELEC (0.09%) / PEPCO (21.75%) / PPL (43.07%)~~

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.21	Upgrade Keystone terminal of Keystone - Buttermilk Fall 500 kV line (formerly Keystone - Conemaugh)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (4.51%) / AEP (0.21%) / APS (0.68%) / ATSI (0.67%) / BGE (0.11%) / Dayton (0.05%) / DEOK (0.06%) / DL (0.36%) / Dominion (9.39%) / DPL (7.27%) / EKPC (0.01%) / JCPL (9.33%) / ME (4.18%) / NEPTUNE* (1.00%) / OVEC (0.02%) / PECO (17.05%) / PENELEC (0.07%) / PEPCO (11.25%) / PPL (22.28%) / PSEG (11.10%) / RE (0.40%)~~APS (0.85%) / ATSI (0.84%) / DL (0.44%) / PECO (32.96%) / PENELEC (0.09%) / PEPCO (21.75%) / PPL (43.07%)~~

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.22	Transmission line work: Loop in Keystone - Conemaugh 500 kV into Buttermilk Falls. Establish Conemaugh - Buttermilk Falls		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.64%) / AEP (20.49%) / APS (3.13%) / ATSI (19.28%) / BGE (12.28%) / ComEd (0.60%) / Dayton (2.37%) / DEOK (2.10%) / DL (6.87%) / Dominion (2.26%) / DPL (0.84%) / EKPC (0.02%) / JCPL (0.52%) / ME (1.13%) / NEPTUNE* (0.06%) / OVEC (0.03%) / PECO (5.41%) / PENELEC (1.89%) / PEPCO (1.65%) / PPL (16.74%) / PSEG (0.67%) / RE (0.02%)~~APS (5.45%) / ATSI (30.97%) / BGE (19.73%) / DL (11.03%) / PENELEC (3.04%) / PEPCO (2.88%) / PPL (26.90%)~~

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.23	Upgrade Conemaugh terminal of Conemaugh - Buttermilk Fall 500 kV line (formerly Keystone - Conemaugh)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.64%) / AEP (20.49%) / APS (3.13%) / ATSI (19.28%) / BGE (12.28%) / ComEd (0.60%) / Dayton (2.37%) / DEOK (2.10%) / DL (6.87%) / Dominion (2.26%) / DPL (0.84%) / EKPC (0.02%) / JCPL (0.52%) / ME (1.13%) / NEPTUNE* (0.06%) / OVEC (0.03%) / PECO (5.41%) / PENELEC (1.89%) / PEPCO (1.65%) / PPL (16.74%) / PSEG (0.67%) / RE (0.02%)~~APS (5.45%) / ATSI (30.97%) / BGE (19.73%) / DL (11.03%) / PENELEC (3.04%) / PEPCO (2.88%) / PPL (26.90%)~~
b4055.1	2024W1 P5: Install open battery monitoring & modify relay wiring:		PENELEC (100%)

	Addressing FG No. 2024-P5DYN-PN04		

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4056.1	2024W1 P5: Move backup relaying DC supply to separate battery and modify relay wiring Addresses FG No. 2024-P5DYN-PN02		PENELEC (100%)
b4065.1	2024W1 P5: Install battery monitoring system & replace 2 115kV line protection schemes. Addresses FG No. 2024-P5-PN04		PENELEC (100%)
b4065.2	2024W1 P5: Install 1 relay panel at a confidential substation connected to the substation associated with b4065.1. Addresses FG No. 2024-P5-PN04		PENELEC (100%)
b4066.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5-PN05		PENELEC (100%)
b4071.1	2024W1 P5: Separate DC supply to backup relaying and the second trip coils, modify relay wiring: Addressing FG No. 2024-P5DYN-PN03		PENELEC (100%)

SCHEDULE 12 – APPENDIX A

(9) PPL Electric Utilities Corporation

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1813.12	Replace the Blooming Grove 230 kV breaker 'Peckville'		PPL (100%)
b2223	Rebuild and reconductor 2.6 miles of the Sunbury - Dauphin 69 kV circuit		PPL (100%)
b2224	Add a 2nd 150 MVA 230/69 kV transformer at Springfield		PPL (100%)
b2237	150 MVAR shunt reactor at Alburtis 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PPL (100%)
b2238	100 MVAR shunt reactor at Elimsport 230 kV		PPL (100%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2269	Rebuild approximately 23.7 miles of the Susquehanna - Jenkins 230 kV 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%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		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 900 MVA 500-230 kV transformer and associated equipment		PPL (100%)
b2552.2	Reconductor the North Meshoppen - Oxbow – Lackawanna 230 kV circuit and upgrade terminal equipment (PPL portion)		PENELEC (63.82%) / PPL (36.18%)
b2574	Replace the Sunbury 230 kV 'MONTOUR NORT' breaker with a 63 kA 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%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2716	Add a 200 MVAR shunt reactor at Lackawanna 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PPL (100%)
b2754.1	Install 7 miles of optical ground wire (OPGW) between Gilbert and Springfield 230 kV substations		PPL (100%)
b2754.4	Use ~ 40 route miles of existing fibers on PPL 230 kV system to establish direct fiber circuits		PPL (100%)
b2754.5	Upgrade relaying at Martins Creek 230 kV		PPL (100%)
b2756	Install 2% reactors at Martins Creek 230 kV		PPL (100%)
b2813	Expand existing Lycoming 69 kV yard to double bus double breaker arrangement		PPL (100%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2824	Reconfigure/Expand the Lackawanna 500 kV substation by adding a third bay with three breakers		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PPL (100%)
b2838	Build a new 230/69 kV substation by tapping the Montour – Susquehanna 230 kV double circuits and Berwick – Hunlock & Berwick – Colombia 69 kV circuits		PPL (100%)
b2979	Replace Martins Creek 230 kV circuit breakers with 80 kA rating		PPL (100%)
b3221	Replace terminal equipment (bus conductor) on the 230 kV side of the Steel City 500/230 kV Transformer #1		PPL (100%)
b3222	Install one (1) 7.2 MVAR fixed cap bank on the Lock Haven – Reno 69 kV line and one (1) 7.2 MVAR fixed cap bank on the Lock Haven – Flemington 69 kV line near the Flemington 69/12 kV substation		PPL (100%)

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PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3664	Replace the limiting 230 kV T2 transformer leads, bay conductor and bus conductor with double bundle 1590 ACSR at the Juniata station; Replace the limiting 1200 A MODs on the bus tie breaker with 3000 A MODs		PPL (100%)
b3698	Reconductor the 14.2 miles of the existing Juniata –Cumberland 230 kV line with 1272 ACSS/TW HS285 "Pheasant" conductor		AEC (4.17%) / BGE (13.18%) / DEOK (1.22%) / Dominion (3.25%) / DPL (9.14%) / ECP** (0.11%) / EKPC (0.22%) / HTP*** (0.20%) /JCPL (1.15%) / ME (27.02%) / NEPTUNE* (0.64%) / PECO (18.88%) / PEPCO (4.68%) / PSEG (16.14%)
b3715.1	Install a new 300 MVA 230/115 kV transformer at the existing PPL Williams Grove substation		ME (100%)
b3715.2	Construct a new approximately 3.4 miles 115 kV single circuit transmission line from Williams Grove to Allen substation		ME (100%)

* Neptune Regional Transmission System, LLC
**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3774	Upgrade terminal equipment at Brunner Island station on Brunner Island – Yorkana 230 kV line		PPL (100%)
b3800.1	Build a New Otter Creek 500 kV (Collinsville) switching station with two bay three breaker configuration		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.16%) / BGE (0.71%) / Dominion (74.28%) / DPL (0.36%) / PECO (0.68%) / PEPCO (10.59%) / PPL (0.22%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.3	New Otter Creek (Collinsville) to Doubs 500 kV Line (Otter Creek 500 kV - MD Border). Rebuild and expand existing approximately 12 miles of Otter Creek - Conastone 230 kV line to become a double-circuit 500 and 230 kV lines		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.16%) / BGE (0.71%) / Dominion (74.28%) / DPL (0.36%) / PECO (0.68%) / PEPCO (10.59%) / PPL (0.22%)
b3800.53	Construct a double-circuit 500 kV line from the existing TMI - Peach Bottom 500 kV right-of-way to the proposed Chanceford switchyard, approximately 1.0 miles in length		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.37%) / Dominion (75.27%) / PEPCO (11.36%)

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PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.54	Perform final tie-ins and commissioning for Chanceford - Doubs 500 kV line energization, upon completion of all transmission owner segments within PA & MD		PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3908.1	Install one 80 MVAr 230 kV capacitor bank at Pocono 230 kV Substation		PPL (100.00%)
b3909.1	Juniata 500 kV yard expansion/reconfiguration to include one new bay and eliminate the line fault stuck breaker		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PPL (100%)
b3910.1	Susquehanna T10 230 kV Station Reconfiguration. Break the existing Susquehanna - Glen Brook 230 kV line and loop it 0.2 miles in and out of the Susquehanna T10 230 kV Station		PPL (100.00%)

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PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.1	Expand existing Slykerville 230 kV station to add a 500 kV yard. Build a new Kelayres 500 kV breaker-and-a-half substation. Add two 890 MVA, 500/230 kV transformers at Kelayres		DPL (0.14%) / JCPL (3.70%) / ME (0.31%) / PECO (2.23%) / PPL (93.62%)~~PPL (100%)~~
b4029.2	Add one 500 kV 4,000 amp circuit breaker, two 500 kV 4,000 amp MODs, and a Kelayres 890 MVA 500/230 kV T3 transformer		DPL (0.14%) / JCPL (3.70%) / ME (0.31%) / PECO (2.23%) / PPL (93.62%)~~PPL (100%)~~
b4029.3	Bifurcate the Sunbury - Susquehanna 500 kV line. From the bifurcation point, build a 13-mile extension to Kelayres, resulting in a Susquehanna-Kelayres 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (8.14%) / APS (0.19%) / ATSI (5.97%) / ComEd (0.05%) / Dayton (0.81%) / DEOK (0.93%) / DL (2.81%) / Dominion (6.90%) / EKPC (0.15%) / ME (0.03%) / OVEC (0.01%) / PENELEC (4.07%) / PEPCO (0.12%) / PPL (69.81%) / PSEG (0.01%)~~PPL (99.99%) / PSEG (0.01%)~~

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PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.4	Bifurcate the Sunbury-Susquehanna 500 kV line bringing both segments into a new Kelayres 500 kV station on separate towers. From the bifurcation point, build a 24-mile extension to Kelayres, resulting in a Sunbury-Kelayres 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.83%) / AEP (0.04%) / ATSI (0.02%) / BGE (0.31%) / DEOK (0.01%) / DL (0.01%) / Dominion (0.06%) / DPL (0.33%) / JCPL (16.05%) / ME (2.12%) / NEPTUNE* (1.67%) / PECO (7.75%) / PENELEC (0.02%) / PEPCO (0.01%) / PPL (31.30%) / PSEG (36.16%) / RE (1.31%)~~AEC (3.17%) / JCPL (17.96%) / NEPTUNE* (1.87%) / PPL (35.04%) / PSEG (40.49%) / RE (1.47%)~~

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PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b4029.5	Susquehanna - Tomhicken 230 kV 1 and 2 DCT line reconductor: Reconduct both circuits on the existing DCT tower with ACCC 1036/87/392 (2045 kcmil) conductor		AEC (0.49%) / AEP (2.04%) / APS (0.04%) / BGE (3.80%) / Dayton (0.22%) / DEOK (0.38%) / Dominion (8.21%) / DPL (0.70%) / EKPC (0.18%) / JCPL (2.47%) / ME (2.09%) / NEPTUNE* (0.08%) / OVEC (0.01%) / PECO (2.98%) / PENELEC (0.65%) / PEPCO (2.95%) / PPL (72.71%)~~PPL (100%)~~
b4029.6	Upgrade the existing Monroe 230/138 kV substation to a two-bay breaker and a half on the 230 kV side (with space to accommodate two future bays), and a double-bus double-breaker design on the 138 kV side		AEC (0.68%) / AEP (1.21%) / APS (0.18%) / ATSI (0.18%) / BGE (1.51%) / Dayton (0.11%) / DEOK (0.17%) / DL (0.23%) / Dominion (3.78%) / DPL (0.32%) / EKPC (0.08%) / JCPL (4.51%) / ME (1.55%) / NEPTUNE* (0.26%) / OVEC (0.01%) / PECO (1.21%) / PENELEC (0.51%) / PEPCO (1.25%) / PPL (66.75%) / PSEG (14.96%) / RE (0.54%)~~PPL (100%)~~

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PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.7	Retermination of the Monroe-Fox Hill and Monroe-Martins Creek 230 kV lines into their new locations in the upgraded 230 kV breaker-and-a-half yard		AEC (0.08%) / AEP (0.66%) / APS (0.01%) / ATSI (2.67%) / BGE (0.09%) / Dayton (0.15%) / DEOK (0.12%) / DL (0.17%) / Dominion (0.06%) / DPL (0.20%) / JCPL (0.56%) / ME (12.49%) / NEPTUNE* (0.04%) / PECO (0.06%) / PENELEC (0.12%) / PEPCO (0.04%) / PPL (58.85%) / PSEG (22.80%) / RE (0.83%)~~PPL (100%)~~
b4029.8	Address end-of-life concerns by rebuilding the existing 38-mile Juniata-Sunbury 500 kV line using single-circuit design		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.96%) / AEP (14.81%) / APS (2.45%) / ATSI (8.22%) / BGE (4.90%) / (0.04%) / Dayton (1.57%) / DEOK (2.13%) / DL (3.18%) / Dominion (29.27%) / DPL (2.99%) / EKPC (0.63%) / JCPL (3.68%) / ME (0.64%) / NEPTUNE* (0.32%) / OVEC (0.03%) / PECO (2.38%) / PENELEC (4.78%) / PEPCO (7.71%) / PPL (3.29%) / PSEG (5.81%) / RE (0.21%)~~AEC (1.22%) / DL (14.42%) / JCPL (4.70%) / NEPTUNE* (0.40%) / PENELEC (21.67%) / PEPCO (34.99%) / PPL (14.92%) / PSEG~~

			~~(7.41%) / RE (0.27%)~~

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PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.9	The Montour-Glen Brook 230 kV 1 and 2 DCT line is 24.9 miles long. For this project, the developer will reconduct 0.70 miles of this route with ACCC 1036/87/392 (2045 kcmil) conductor. Another 5.2 miles of the route will be rebuilt with new steel pole structures and double-bundle 1590 ACSR conductor. The remaining 19 miles of the route is being rebuilt and reconductored as part of supplemental project s2373 to address end of life for CORTEN structures.		AEC (2.09%) / APS (0.51%) / BGE (3.49%) / DEOK (0.07%) / Dominion (4.01%) / EKPC (0.02%) / JCPL (12.28%) / ME (2.08%) / NEPTUNE* (1.35%) / PECO (5.25%) / PENELEC (0.02%) / PEPCO (1.96%) / PPL (39.65%) / PSEG (26.27%) / RE (0.95%)~~PPL (100%)~~
b4029.10	At Glen Brook 230/69 kV substation, replace ten 230 kV, 2000A MODs with 230 kV, 3000A MODs		PPL (100%)

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PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.11	At the Jenkins 230/69 kV substation, re-terminate the Jenkins 230/69 kV T2 and T4 transformers into bay positions in the 69 kV and 230 kV yards, respectively. Add one new 230 kV, 3000A circuit breaker, and two 230 kV, 3000A MODs to accommodate the retermination of the T4 transformer into the east bay position in the existing 230 kV breaker-and-a-half bay 2. Add two new 69 kV, 3000A circuit breakers and four 69 kV, 3000A switches to accommodate the retermination of the T2 transformer into a new 69 kV double-bus double-breaker Bay 4		AEC (0.03%) / JCPL (0.15%) / NEPTUNE* (0.02%) / PPL (99.36%) / PSEG (0.42%) / RE (0.02%)~~PPL (100%)~~
b4029.12	Reterminate high side of T4 transformer into Bay 2E of the 230 kV yard		AEC (0.03%) / JCPL (0.08%) / NEPTUNE* (0.02%) / PPL (99.40%) / PSEG (0.45%) / RE (0.02%)~~PPL (100%)~~
b4029.13	Glen Brook - Susquehanna T10 1 & 2 DCT line reconductor		AEC (2.38%) / APS (0.58%) / BGE (3.97%) / DEOK (0.08%) / DL (0.01%) / Dominion (4.56%) / EKPC (0.02%) / JCPL (13.97%) / ME (2.37%) / NEPTUNE* (1.54%) / PECO (5.98%) / PENELEC (0.03%) / PEPCO (2.23%) / PPL (31.28%) / PSEG (29.91%) / RE (1.09%)~~PPL (100%)~~

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PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.14	Susquehanna T10 - Susquehanna 230 kV No. 3 line: Construct a new Susquehanna T10-Susquehanna 230 kV No. 3 line (~2.7 miles) using an approximately 75% brownfield route, with a short greenfield segment near the Susquehanna station		AEC (2.12%) / AEP (0.25%) / APS (0.93%) / BGE (4.99%) / Dayton (0.06%) / DEOK (0.18%) / Dominion (7.03%) / DPL (0.56%) / EKPC (0.10%) / JCPL (10.95%) / ME (2.62%) / NEPTUNE* (1.16%) / PECO (7.04%) / PEPCO (3.12%) / PPL (39.63%) / PSEG (18.58%) / RE (0.68%)~~PPL (100%)~~
b4029.15	Construct a new breaker-and-a-half bay at Susquehanna T10 230 kV station and initially populate with two 230 kV, 3000A circuit breakers and four 230 kV, 3000A MODs, leaving a position for a future breaker to be added		AEC (2.12%) / AEP (0.25%) / APS (0.93%) / BGE (4.99%) / Dayton (0.06%) / DEOK (0.18%) / Dominion (7.03%) / DPL (0.56%) / EKPC (0.10%) / JCPL (10.95%) / ME (2.62%) / NEPTUNE* (1.16%) / PECO (7.04%) / PEPCO (3.12%) / PPL (39.63%) / PSEG (18.58%) / RE (0.68%)~~PPL (100%)~~
b4029.16	Reuse existing bay and upgrade to 3000A. Existing bay at Susquehanna vacated by the former Sunbury line. Inspect all facilities, refurbish and insure bay rating of 3000A		AEC (2.12%) / AEP (0.25%) / APS (0.93%) / BGE (4.99%) / Dayton (0.06%) / DEOK (0.18%) / Dominion (7.03%) / DPL (0.56%) / EKPC (0.10%) / JCPL (10.95%) / ME (2.62%) / NEPTUNE* (1.16%) / PECO (7.04%) / PEPCO (3.12%) / PPL (39.63%) / PSEG (18.58%) / RE (0.68%)~~PPL (100%)~~
b4029.18	Replace Six 230 kV breakers at Susquehanna		PPL (100%)

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PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.4	Upgrade Juniata terminal of Keystone - Juniata 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (3.06%) / AEP (1.54%) / Dayton (0.50%) / DEOK (1.31%) / Dominion (5.70%) / DPL (2.76%) / EKPC (0.80%) / JCPL (10.41%) / ME (6.83%) / NEPTUNE* (1.13%) / PECO (11.62%) / PEPCO (4.73%) / PPL (32.94%) / PSEG (16.09%) / RE (0.58%)~~AEC (3.70%) / JCPL (12.60%) / ME (8.26%) / NEPTUNE* (1.36%) / PECO (14.05%) / PPL (39.85%) / PSEG (19.47%) / RE (0.71%)~~

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.15	Install two new 500 kV circuit breaker at North and South bus to terminate the 765-500 kV transformers leads. Upgrade protection settings at Juniata (PPL Work)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)~~AEC (3.01%) / APS (11.60%) / DPL (2.65%) / JCPL (10.45%) / ME (5.35%) / NEPTUNE* (1.13%) / PECO (11.33%) / PEPCO (5.18%) / PPL (31.99%) / PSEG (16.70%) / RE (0.61%)~~

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.17	Install two new 500 kV circuit breakers with 63 kA, 5000A rating in transformer T24 and T25 bay. Both transformers will be in double bus double breaker position after adding these two new breakers. (Sunbry)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)~~AEC (3.01%) / APS (11.60%) / DPL (2.65%) / JCPL (10.45%) / ME (5.35%) / NEPTUNE* (1.13%) / PECO (11.33%) / PEPCO (5.18%) / PPL (31.99%) / PSEG (16.70%) / RE (0.61%)~~

* Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(10) Potomac Electric Power Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2279	Add two 100 MVAR reactors at Dickerson Station H and two 100 MVAR reactors at Brighton 230 kV substation		PEPCO (100%)
b2372	Upgrade the Chalk Point - T133TAP 230 kV Ck. 1 (23063) and Ckt. 2 (23065) to 1200 MVA ACCR		BGE (100%)
b3780.11	Add a 350 MVAR STATCOM and a 350 MVAR capacitor at Brighton 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PEPCO (100%)
b3780.12	Add a 250 MVAR capacitor at Burchess Hill 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PEPCO (100%)

*Neptune Regional Transmission System, LLC

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

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.33	Replace terminal equipment limitations at Brighton 500 kV - on the existing Brighton - Waugh Chapel 500 kV (5053) line or the new Brighton - High Ridge 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.68%) / BGE (86.77%) / Dominion (1.91%) / PEPCO (10.64%)
b3800.38	Chalk Point - Cheltenham 500 kV line (5073 line) - Replace relay at Chalk Point 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (39.75%) / Dominion (59.03%) / PEPCO (1.22%)

*Neptune Regional Transmission System, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.40	Conastone - Brighton 500 kV line (5011 line) - Replace terminal equipment limitations at Brighton 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (9.65%) / Dominion (63.04%) / DPL (0.02%) / PEPCO (27.29%)
b3800.243	Rebuild 7.26 miles of existing 230 kV circuit from Dickerson Station H to Ed's Ferry area to accommodate the new 500 kV circuit between Doubs and Aspen (the 500 kV portion of the work)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.09%) / Dominion (99.89%) / PEPCO (0.02%)
b3800.244	Rebuild 7.26 miles of existing 230 kV circuit from Dickerson Station H to Ed's Ferry area to accommodate the new 500 kV circuit between Doubs and Aspen (the 230 kV portion of the project)		APS (9.78%) / BGE (12.07%) / Dominion (51.18%) / PEPCO (26.97%)

*Neptune Regional Transmission System, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.245	Reconfigure Dickerson H 230 kV substation and upgrade terminal equipment		APS (9.78%) / BGE (12.07%) / Dominion (51.18%) / PEPCO (26.97%)
b4052.1	New 500/230 kV substation (Dickerson) by cutting into the Aspen - Rocky Point 500 kV line.		AEC (0.52%) / APS (27.68%) / BGE (22.04%) / ComEd (0.15%) / DPL (1.50%) / ME (2.68%) / PECO (1.91%) / PENELEC (0.01%) / PEPCO (42.65%) / PSEG (0.83%) / RE (0.03%)~~APS (29.97%) / BGE (23.86%) / PEPCO (46.17%)~~
b4052.2	Install two 500/230 kV transformers connecting a new 500 kV Dickerson station and Dickerson "H" 230 kV station including 230 kV substation work.		AEC (0.52%) / APS (27.68%) / BGE (22.04%) / ComEd (0.15%) / DPL (1.50%) / ME (2.68%) / PECO (1.91%) / PENELEC (0.01%) / PEPCO (42.65%) / PSEG (0.83%) / RE (0.03%)~~APS (29.97%) / BGE (23.86%) / PEPCO (46.17%)~~
b4052.3	Rocky Point - Dickerson (new 500 kV) termination work at Dickerson 500 kV.		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (1.64%) / Dominion (83.16%) / PEPCO (14.87%) / PPL (0.33%)~~Dominion (84.83%) / PEPCO (15.17%)~~

*Neptune Regional Transmission System, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4052.4	Aspen - Dickerson (new 500 kV) termination work at Dickerson 500 kV.		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (0.40%) / Dayton (0.11%) / Dominion (99.20%) / EKPC (0.29%)~~Dominion (100%)~~
b4052.7	Install 3.2% 230 kV series Reactor at Dickerson "H" terminal side of the Edwards Ferry - Dickerson line.		AEC (0.23%) / AEP (1.82%) / APS (4.76%) / ATSI (0.05%) / BGE (3.71%) / ComEd (0.08%) / Dayton (0.35%) / DEOK (0.95%) / DL (0.06%) / Dominion (77.57%) / DPL (0.49%) / EKPC (0.40%) / JCPL (0.29%) / ME (0.61%) / NEPTUNE* (0.03%) / OVEC (0.01%) / PECO (0.82%) / PENELEC (0.02%) / PEPCO (6.90%) / PPL (0.46%) / PSEG (0.38%) / RE (0.01%)~~BGE (6.60%) / Dominion (81.09%) / PEPCO (12.31%)~~
b4052.8	Relocate Dickerson "D"- Quince Orchard 23035 to terminate at Dickerson "H" at Dickerson No.2 Tie location.		AEC (0.77%) / ATSI (2.49%) / BGE (30.33%) / ComEd (0.08%) / DL (0.49%) / Dominion (0.01%) / DPL (2.16%) / JCPL (0.05%) / ME (0.39%) / NEPTUNE* (0.01%) / PECO (2.66%) / PEPCO (60.38%) / PSEG (0.17%) / RE (0.01%)~~BGE (33.43%) / PEPCO (66.57%)~~

*Neptune Regional Transmission System, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4052.9	Replace two breakers, one bushing CT, one stranded bus conductor, four disconnect switches at Brighton 500 kV substation.		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.57%) / AEP (1.27%) / APS (0.10%) / ATSI (1.01%) / BGE (46.14%) / ComEd (0.32%) / Dayton (0.14%) / DEOK (0.32%) / DL (1.77%) / Dominion (7.34%) / DPL (6.94%) / EKPC (0.16%) / JCPL (0.61%) / NEPTUNE* (0.07%) / OVEC (0.01%) / PECO (8.89%) / PENELEC (0.09%) / PEPCO (21.96%) / PPL (0.13%) / PSEG (0.15%) / RE (0.01%)~~AEC (2.60%) / BGE (46.66%) / DL (1.79%) / DPL (7.02%) / Dominion (10.73%) / PECO (8.99%) / PEPCO (22.21%)~~
b4052.10	Replace one stranded bus conductor, three thermal relays, two disconnect switches at Quince Orchard 230 kV substation.		AEC (0.76%) / ATSI (2.45%) / BGE (29.85%) / ComEd (0.08%) / DL (0.48%) / DPL (2.12%) / JCPL (0.04%) / ME (0.38%) / NEPTUNE* (0.01%) / PECO (2.63%) / PEPCO (61.03%) / PSEG (0.16%) / RE (0.01%)~~BGE (32.84%) / PEPCO (67.16%)~~
b4052.11	Replace Bells Mill T3 transformer with new PEPCO standard 260 MVA 230/138 kV transformer.		AEC (0.05%) / BGE (0.80%) / DPL (0.27%) / EKPC (0.02%) / PECO (0.15%) / PEPCO (98.40%) / PPL (0.31%)~~PEPCO (100%)~~

*Neptune Regional Transmission System, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b405~~2~~3.29	Uprate 500 kV Line #560 terminal equipment at Burches Hill substation in PEPCO so as not to limit the conductor rating. The scope includes upgrading/replacing two circuit breakers, four switches, and two different portions of stranded bus.		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.16%) / AEP (3.00%) / APS (4.93%) / ATSI (1.22%) / BGE (13.58%) / ComEd (0.47%) / Dayton (0.36%) / DEOK (0.93%) / DL (0.17%) / Dominion (28.08%) / DPL (0.74%) / EKPC (0.51%) / JCPL (1.09%) / ME (0.89%) / NEPTUNE* (0.12%) / OVEC (0.01%) / PECO (0.53%) / PENELEC (0.09%) / PEPCO (34.86%) / PPL (7.38%) / PSEG (0.85%) / RE (0.03%)~~BGE (15.58%) / Dominion (34.85%) / ME (1.10%) / PEPCO (40%) / PPL (8.47%)~~

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(12) Public Service Electric and Gas Company

Required Transmission Enhancements		Annual Revenue Requirement	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%)

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)
b2276	Eliminate the Sewaren 138 kV bus by installing a new 230 kV bay at Sewaren 230 kV		PSEG (96.50%) / RE (3.50%)
b2276.1	Convert the two 138 kV circuits from Sewaren – Metuchen to 230 kV circuits including Lafayette and Woodbridge substation		PSEG (96.50%) / RE (3.50%)
b2276.2	Reconfigure the Metuchen 230 kV station to accommodate the two converted circuits		PSEG (96.50%) / RE (3.50%)
b2290	Replace disconnect switches at Kilmer, Lake Nilson and Greenbrook 230 kV substations on the Raritian River - Middlesex (I-1023) circuit		PSEG (100%)
b2291	Replace circuit switcher at Lake Nelson 230 kV substation on the Raritian River - Middlesex (W-1037) circuit		PSEG (100%)
b2295	Replace the Salem 500 kV breaker 10X with 63 kA breaker		PSEG (100%)
b2421	Install all 69 kV lines to interconnect Plainfield, Greenbrook, and Bridgewater stations and establish the 69 kV network		PSEG (100%)
b2421.1	Install two 18 MVAR capacitors at Plainfield and S. Second St substation		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2421.2	Install a second four (4) breaker 69 kV 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 (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PSEG (96.50%) / RE (3.50%)
b2436.21	Convert the Marion - Bayonne "L" 138 kV circuit to 345 kV and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PSEG (96.50%) / RE (3.50%)

*Neptune Regional Transmission System, LLC

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2436.22	Convert the Marion - Bayonne "C" 138 kV circuit to 345 kV and any associated substation upgrades	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PSEG (96.50%) / RE (3.50%)
b2436.33	Construct a new Bayway – Bayonne 345 kV circuit and any associated substation upgrades	PSEG (96.50%) / RE (3.50%)
b2436.34	Construct a new North Ave – Bayonne 345 kV circuit and any associated substation upgrades	PSEG (96.50%) / RE (3.50%)

*Neptune Regional Transmission System, LLC

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2436.50	Construct a new North Ave - Airport 345 kV circuit and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2436.60	Relocate the underground portion of North Ave - Linden "T" 138 kV circuit to Bayway, convert it to 345 kV, and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2436.70	Construct a new Airport - Bayway 345 kV circuit and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2436.81	Relocate the overhead portion of Linden - North Ave "T" 138 kV circuit to Bayway, convert it to 345 kV, and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PSEG (96.50%) / RE (3.50%)

*Neptune Regional Transmission System, LLC

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2436.83	Convert the Bayway - Linden "Z" 138 kV circuit to 345 kV and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PSEG (96.50%) / RE (3.50%)
b2436.84	Convert the Bayway – Linden "W" 138 kV circuit to 345 kV and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PSEG (96.50%) / RE (3.50%)

*Neptune Regional Transmission System, LLC

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2436.85	Convert the Bayway – Linden "M" 138 kV circuit to 345 kV and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PSEG (96.50%) / RE (3.50%)
b2436.90	Relocate Farragut - Hudson "B" and "C" 345 kV circuits to Marion 345 kV and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			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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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2437.10	New Bergen 345/230 kV transformer and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2437.11	New Bergen 345/138 kV transformer #1 and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2437.20	New Bayway 345/138 kV transformer #1 and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2437.21	New Bayway 345/138 kV transformer #2 and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2437.30	New Linden 345/230 kV transformer and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2437.33	New Bayonne 345/69 kV transformer and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2438	Install two reactors at Tosco 230 kV		PSEG (100%)
b2439	Replace the Tosco 138 kV breaker 'CB1/2 (CBT)' with 63 kA		PSEG (100%)
b2474	Rebuild Athenia 138 kV to 80 kA		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%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2633.3	Install an SVC at New Freedom 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)
b2633.4	Add a new 500 kV bay at Hope Creek (Expansion of Hope Creek substation)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			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%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2633.5	Add a new 500/230 kV autotransformer at Hope Creek and a new Hope Creek 230 kV substation		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%)
b2633.8	Implement high speed relaying utilizing OPGW on Salem – Orchard 500 kV, Hope Creek – New Freedom 500 kV, New Freedom - Salem 500 kV, Hope Creek – Salem 500 kV, and New Freedom – Orchard 500 kV lines		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2633.91	Implement changes to the tap settings for the two Salem units' step up transformers		AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)
b2633.92	Implement changes to the tap settings for the Hope Creek unit's step up transformers		AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)
b2702	Install a 350 MVAR reactor at Roseland 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PSEG (100%)
b2703	Install a 100 MVAR reactor at Bergen 230 kV		PSEG (100%)
b2704	Install a 150 MVAR reactor at Essex 230 kV		PSEG (100%)
b2705	Install a 200 MVAR reactor (variable) at Bergen 345 kV		PSEG (100%)
b2706	Install a 200 MVAR reactor (variable) at Bayway 345 kV		PSEG (100%)
b2707	Install a 100 MVAR reactor at Bayonne 345 kV		PSEG (100%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2712	Replace the Bergen 138 kV '40P'breaker with 80 kA breaker		PSEG (100%)
b2713	Replace the Bergen 138 kV '90P' breaker with 80 kA 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 (96.50%) / RE (3.50%)
b2810.1	Install second 230/69 kV transformer at Cedar Grove		PSEG (96.50%) / RE (3.50%)
b2810.2	Build a new 69 kV circuit from Cedar Grove to Great Notch		PSEG (96.50%) / RE (3.50%)
b2811	Build 69 kV circuit from Locust Street to Delair		PSEG (96.50%) / RE (3.50%)
b2812	Construct River Road to Tonnelle Avenue 69kV Circuit		PSEG (96.50%) / RE (3.50%)
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

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual 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 (19.05%) / PECO (40.42%) / PSEG (39.11%) / RE (1.42%)
b2835.2	Convert the R-1318 and Q-1317 (Edison - Metuchen) 138 kV circuits to one 230 kV circuit (Meadow Road - Pierson Ave)		AEC (17.54%) / PECO (37.20%) / PSEG (43.68%) / RE (1.58%)
b2835.3	Convert the R-1318 and Q-1317 (Edison - Metuchen) 138 kV circuits to one 230 kV circuit (Pierson Ave - Metuchen)		AEC (16.23%) / PECO (34.43%) / PSEG (47.61%) / RE (1.73%)
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 (5.38%) / NEPTUNE* (76.74%) / PECO (11.92%) / PSEG (5.75%) / RE (0.21%)
b2836.2	Convert the N-1340 and T-1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Hunterglen - Trenton)		AEC (0.12%) / NEPTUNE* (8.78%) / PECO (0.26%) / PSEG (87.66%) / RE (3.18%)
b2836.3	Convert the N-1340 and T-1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Brunswick - Devils Brook)		AEC (3.16%) / NEPTUNE* (89.27%) / PECO (6.92%) / PSEG (0.63%) / RE (0.02%)
b2836.4	Convert the N-1340 and T-1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Devils Brook - Trenton)		AEC (0.96%) / NEPTUNE* (16.42%) / PECO (2.10%) / PSEG (77.70%) / RE (2.82%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual 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)		AEC (0.01%) / NEPTUNE* (8.73%) / PSEG (88.06%) / RE (3.20%)
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* (7.02%) / PSEG (89.72%) / RE (3.26%)
b2837.3	Convert the N-1340 and T-1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Brunswick - Devils Brook)		NEPTUNE* (6.60%) / PSEG (90.13%) / RE (3.27%)
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* (5.62%) / PSEG (91.07%) / RE (3.31%)
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* (4.53%) / PSEG (92.13%) / RE (3.34%)
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)		AEC (0.03%) / NEPTUNE* (11.15%) / PSEG (85.71%) / RE (3.11%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual 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)		AEC (0.01%) / NEPTUNE* (8.32%) / PSEG (88.46%) / RE (3.21%)
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)		AEC (0.01%) / NEPTUNE* (8.32%) / PSEG (88.46%) / RE (3.21%)
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* (6.71%) / PSEG (90.02%) / RE (3.27%)
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* (6.05%) / PSEG (90.66%) / RE (3.29%)
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* (4.10%) / PSEG (92.54%) / RE (3.36%)
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		PSEG (96.50%) / RE (3.50%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2933.1	Construct a 230/69 kV station at Springfield		PSEG (96.50%) / RE (3.50%)
b2933.2	Construct a 230/69 kV station at Stanley Terrace		PSEG (96.50%) / RE (3.50%)
b2933.31	Construct a 69 kV network between Front Street, Springfield and Stanley Terrace (Front Street - Springfield)		PSEG (96.50%) / RE (3.50%)
b2933.32	Construct a 69 kV network between Front Street, Springfield and Stanley Terrace (Springfield – Stanley Terrace)		PSEG (96.50%) / RE (3.50%)
b2934	Build a new 69 kV line between Hasbrouck Heights and Carlstadt		PSEG (96.50%) / RE (3.50%)
b2935	Third Supply for Runnemede 69 kV and Woodbury 69 kV		PSEG (96.50%) / RE (3.50%)
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 (96.50%) / RE (3.50%)
b2935.2	Build a new line between Hilltop and Woodbury 69 kV providing the 3rd supply		PSEG (96.50%) / RE (3.50%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual 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 (96.50%) / RE (3.50%)
b2955	Wreck and rebuild the VFT – Warinanco – Aldene 230 kV circuit with paired conductor		PSEG (96.50%) / RE (3.50%)
b2956	Replace existing cable on Cedar Grove - Jackson Rd. with 5000 kcmil XLPE cable		PSEG (96.50%) / RE (3.50%)
b2982	Construct a 230/69 kV station at Hillsdale Substation and tie to Paramus and Dumont at 69 kV		PSEG (96.50%) / RE (3.50%)
b2982.1	Install a 69 kV ring bus and one (1) 230/69 kV transformer at Hillsdale		PSEG (96.50%) / RE (3.50%)
b2982.2	Construct a 69 kV network between Paramus, Dumont, and Hillsdale Substation using existing 69 kV circuits		PSEG (96.50%) / RE (3.50%)
b2983	Convert Kuller Road to a 69/13 kV station		PSEG (96.50%) / RE (3.50%)
b2983.1	Install 69 kV ring bus and two (2) 69/13 kV transformers at Kuller Road		PSEG (96.50%) / RE (3.50%)
b2983.2	Construct a 69 kV network between Kuller Road, Passaic, Paterson, and Harvey (new Clifton area switching station)		PSEG (96.50%) / RE (3.50%)
b2986	Replace the existing Roseland – Branchburg – Pleasant Valley 230 kV corridor with new structures		See sub-IDs for cost allocations

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2986.11	Roseland-Branchburg 230 kV corridor rebuild (Roseland - Readington)		PSEG (96.50%) / RE (3.50%)
b2986.12	Roseland-Branchburg 230 kV corridor rebuild (Readington - Branchburg)		JCPL (49.11%) / PSEG (49.11%) / RE (1.78%)
b2986.21	Branchburg-Pleasant Valley 230 kV corridor rebuild (Branchburg - East Flemington)		NEPTUNE* (1.61%) / PECO (93.16%) / PSEG (5.05%) / RE (0.18%)
b2986.22	Branchburg-Pleasant Valley 230 kV corridor rebuild (East Flemington - Pleasant Valley)		AEC (4.04%) / NEPTUNE* (14.95%) / PECO (25.30%) / PSEG (53.76%) / RE (1.95%)
b2986.23	Branchburg-Pleasant Valley 230 kV corridor rebuild (Pleasant Valley - Rocktown)		JCPL (26.74%) / NEPTUNE* (4.44%) / PECO (0.43%) / PSEG (66.00%) / RE (2.39%)
b2986.24	Branchburg-Pleasant Valley 230 kV corridor rebuild (the PSEG portion of Rocktown - Buckingham)		JCPL (31.10%) / NEPTUNE* (3.97%) / PECO (0.29%) / PSEG (62.38%) / RE (2.26%)
b3003	Construct a 230/69 kV station at Maywood		PSEG (96.50%) / RE (3.50%)
b3003.1	Purchase properties at Maywood to accommodate new construction		PSEG (96.50%) / RE (3.50%)
b3003.2	Extend Maywood 230 kV bus and install one (1) 230 kV breaker		PSEG (96.50%) / RE (3.50%)
b3003.3	Install one (1) 230/69 kV transformer at Maywood		PSEG (96.50%) / RE (3.50%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3003.4	Install Maywood 69 kV ring bus		PSEG (96.50%) / RE (3.50%)
b3003.5	Construct a 69 kV network between Spring Valley Road, Hasbrouck Heights, and Maywood		PSEG (96.50%) / RE (3.50%)
b3004	Construct a 230/69/13 kV station by tapping the Mercer – Kuser Rd 230 kV circuit		PSEG (96.50%) / RE (3.50%)
b3004.1	Install a new Clinton 230 kV ring bus with one (1) 230/69 kV transformer Mercer - Kuser Rd 230 kV circuit		PSEG (96.50%) / RE (3.50%)
b3004.2	Expand existing 69 kV ring bus at Clinton Ave with two (2) additional 69 kV breakers		PSEG (96.50%) / RE (3.50%)
b3004.3	Install two (2) 69/13 kV transformers at Clinton Ave		PSEG (96.50%) / RE (3.50%)
b3004.4	Install 18 MVAR capacitor bank at Clinton Ave 69 kV		PSEG (96.50%) / RE (3.50%)
b3025	Construct two (2) new 69/13 kV stations in the Doremus area and relocate the Doremus load to the new stations		PSEG (96.50%) / RE (3.50%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3025.1	Install a new 69/13 kV station (Vauxhall) with a ring bus configuration		PSEG (96.50%) / RE (3.50%)
b3025.2	Install a new 69/13 kV station (19th Ave) with a ring bus configuration		PSEG (96.50%) / RE (3.50%)
b3025.3	Construct a 69 kV network between Stanley Terrace, Springfield Road, McCarter, Federal Square, and the two new stations (Vauxhall & 19th Ave)		PSEG (96.50%) / RE (3.50%)
b3703	Construct a third 69 kV supply line from Penns Neck substation to West Windsor substation		PSEG (100%)
b3704	Replace the Lawrence switching station 230/69 kV Transformer No. 220-4 and its associated circuit switchers with a new larger capacity transformer with load tap changer (LTC) and new dead tank circuit breaker. Install a new 230 kV gas insulated breaker, associated disconnects, overhead bus and other necessary equipment to complete the bay within the Lawrence 230 kV switchyard		PSEG (96.50%) / RE (3.50%)
b3705	Replace existing 230/138 kV Athenia Transformer No. 220-1		PSEG (96.50%) / RE (3.50%)
b3706	Replace Fair Lawn 230/138 kV transformer No. 220-1 with an existing O&M system spare at Burlington		PSEG (100%)
b3716	Construct a third 69 kV supply line from Totowa substation to the customer's substation		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3719	Replace the two existing 1200A Bergen 138 kV circuit switchers with two 138 kV disconnect switches to achieve a minimum summer normal device rating of 298 MVA and a minimum summer emergency rating of 454 MVA		PSEG (100%)
b3757	Convert existing Medford 69 kV straight bus to seven-breaker ring bus, construct a new 230/69 kV transformer at Cox's Corner station and a new 69 kV line from Cox's Corner station to Medford station		PSEG (100%)
b3794.1	Replace existing Waldwick 230 kV 50 MVAR fixed shunt reactor with a 230 kV 150 MVAR variable shunt reactor		PSEG (100%)
b3794.2	Replace existing Waldwick 345 kV 100 MVAR fixed shunt reactor with a 345 kV 150 MVAR variable shunt reactor		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3848.1	Open East Rutherford 69 kV tie breaker (26K)		PSEG (100%)
b3848.2	Move line U-775 (East Rutherford to Hasbrouck Heights) currently on section 2 to section 7 of the ring bus		PSEG (100%)
b3849.1	Perform all necessary engineering design and evaluation to increase Fairlawn 69 kV GIS from 50 kA to 55 kA		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3855.1	Build 4 miles new 230 kV XLPE Circuit using (345 kV rated 5000kcmil cable) from Jackson Road 230 kV station to Cedar Grove 230 kV station		PSEG (95.85%) / RE (4.15%)
b3855.2	Expand a new 230 kV bay at the existing Cedar Grove station with one line position by adding two 230 kV circuit breakers and associated disconnect switches		PSEG (95.85%) / RE (4.15%)
b3855.3	Replace the existing HPFF termination structure with a new XLPE termination structure to connect to spare GIS bay position at Jackson 230 kV station		PSEG (95.85%) / RE (4.15%)
b3868.1	Cut existing Carlstadt to River Road 69 kV line and extend Carlstadt line side to Penhorn 69 kV. Extend the other end of the line by constructing a new portion and connecting it to Kingsland 69 kV switch.		PSEG (100%)
b3868.2	Extend the other end of L-636 to Kingsland switch by constructing new 5.5 miles portion utilizing existing I-2314 Transmission towers from H-A 5/4 to H-A 2/3. New 69kV line to be routed along County Ave pass Secaucus Rd in Secaucus NJ.		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3868.3	Reconfigure former River Road to Carlstadt 69 kV and Tonnelle Ave to Union City 69 kV lines at the intersection Tonnelle Ave and Granton Ave in North Bergen, NJ by connecting Union City to River Road and Tonnelle Ave to Kingsland.		PSEG (100%)
b3869.1	Relocate the Bergen Gen No. 1 point of interconnection from Bergen 138 kV to Bergen 345 kV GIS through the existing 345/138 kV transformer		PSEG (100%)
b3869.2	Remove and retire the two (2) existing Bergen 138 kV series reactors and associated ancillary equipment		PSEG (100%)
b3869.3	Replace the two Bergen 138 kV series reactors with two new dry type 138 kV series reactors		PSEG (100%)
b3939.1	2024W1 PSEG P5 Solution #1 - Battery monitoring upgrades at PSEG substation. Addresses the following flowgate:2024-P5-PSEG01		PSEG (100%)
b3939.2	2024W1 PSEG P5 Solution #2 - Battery monitoring upgrades at PSEG substation. Addresses the following flowgate:2024-P5-PSEG02		PSEG (100%)
b3939.3	2024W1 PSEG P5 Solution #3 - Battery monitoring upgrades at PSEG substation. Addresses the following flowgate:2024-P5-PSEG03		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3939.4	2024W1 PSEG P5 Solution #4 - Battery monitoring upgrades at PSEG substation. Addresses the following flowgate:2024-P5DYN-PSEG01		PSEG (100%)
b3939.5	2024W1 PSEG P5 Solution #5 - Battery monitoring upgrades at PSEG substation. Addresses the following flowgate:2024-P5DYN-PSEG02		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4005.1	Replace the existing 1590 ACSR single conductor on the Roseland to Livingston 230 kV line with a 1590 ACSS single conductor		AEC (1.33%) / AEP (0.01%) / APS (0.16%) / ATSI (0.01%) / BGE (0.02%) / ComEd (0.05%) / Dominion (0.04%) / DPL (0.57%) / JCPL (0.18%) / ME (0.35%) / NEPTUNE* (0.01%) / PECO (1.04%) / PENELEC (0.06%) / PEPCO (0.01%) / PPL (0.01%) / PSEG (92.78%) / RE (3.37%)~~PSEG (96.50%) / RE (3.50%)~~
b4005.2	Replace the existing 1590 ACSR single conductor on the Roseland to Laurel Ave 230 kV line with a 1590 ACSS single conductor		AEC (1.46%) / AEP (0.01%) / APS (0.16%) / ATSI (0.01%) / BGE (0.04%) / ComEd (0.06%) / DL (0.01%) / Dominion (0.09%) / DPL (0.62%) / JCPL (0.39%) / ME (0.39%) / NEPTUNE* (0.03%) / PECO (1.13%) / PENELEC (0.07%) / PEPCO (0.03%) / PPL (0.02%) / PSEG (92.14%) / RE (3.34%)~~PSEG (96.50%) / RE (3.50%)~~
b4019.1	Replace/update riser structure, pot head, cable and sweeps as required to accept high-capacity conductor at Rahway 69 kV. Rebuild duct banks as needed		PSEG (100%)
b4019.2	Replace/update riser structure, pot head, cable and sweeps as required to accept high-capacity conductor at Roselle 69 kV		PSEG (100%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4019.3	Reconductor 69 kV line from Rahway to Roselle Station. High-capacity conductor to be rated at least 1100 Summer Normal and 1200 Summer Emergency		PSEG (100%)
b4020.1	Replace/update pole riser, pot head riser, associated sweeps and cable as required to accept high-capacity conductor at Gloucester 230 kV. Replace LP41K relays with new primary SEL-311L and backup SEL-411L relays.		PSEG (100%)
b4020.2	Replace existing OH wire with high-capacity conductor at Nicholson 230 kV. Replace LP10K relays with new primary SEL-311L and backup SEL-411L relays.		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4020.3	Wreck and Rebuild OH circuit including transfer of any underbuilt circuits below the 69 kV. Install shield wire. Install fiber and all necessary fiber accessories. Install high-capacity conductor from Gloucester to Nicholson. Minimum Ratings: Summer Normal -1100 amps (131MVA).		PSEG (100%)
b4021.1	Upgrade the Pfisterer connection inside of Prospect Park to accept new high-capacity cable; modify conduit as needed		PSEG (100%)
b4021.2	Upgrade the Pfisterer connection inside of North Paterson to accept new high-capacity cable; reconfigure duct banks in North Paterson to accommodate new high-capacity cable		PSEG (100%)
b4021.3	Reconductor 69 kV line from Prospect Park to North Paterson with a high-capacity conductor, including installing new composite poles and manholes along the line as required		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4032.4	PSEG 500 kV transmission line work: Loop the Roseland-Hopatcong 500 kV line into JCPL Montville substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.90%) / APS (0.29%) / ComEd (0.02%) / DPL (0.67%) / JCPL (28.46%) / ME (0.80%) / NEPTUNE* (2.58%) / PENELEC (0.46%) / PSEG (62.55%) / RE (2.27%)~~JCPL (29.6%) / NEPTUNE* (2.69%) / PSEG (65.25%) / RE (2.37%)~~

* Neptune Regional Transmission System, LLC

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4032.5	500 kV terminal upgrade at Hopatcong and Roseland-Loop the Roseland-Hopatcong 500 kV line into Montville substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.90%) / APS (0.29%) / ComEd (0.02%) / DPL (0.67%) / JCPL (28.46%) / ME (0.80%) / NEPTUNE* (2.58%) / PENELEC (0.46%) / PSEG (62.55%) / RE (2.27%)~~JCPL (29.6%) / NEPTUNE* (2.69%) / PSEG (65.25%) / RE (2.37%)~~
b4032.6	PSEG 230 kV transmission line work: Rework PSEG 230 kV lines into JCPL Montville substation		APS (0.47%) / ATSI (0.08%) / ComEd (0.06%) / DPL (1.66%) / NEPTUNE* (4.43%) / PECO (5.28%) / PENELEC (0.51%) / PSEG (84.45%) / RE (3.06%)~~NEPTUNE* (4.82%) / PSEG (91.85%) / RE (3.33%)~~

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SCHEDULE 12 – APPENDIX A

(14) Monongahela Power Company and The Potomac Edison Company, doing business as Allegheny Power

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2117	Reconductor 0.33 miles of the Parkersburg - Belpre line and upgrade Parkersburg terminal equipment		APS (100%)
b2118	Add 44 MVAR Cap at New Martinsville		APS (100%)
b2142	Replace Weirton 138 kV breaker “Wylie Ridge 210” with 63 kA breaker		APS (100%)
b2143	Replace Weirton 138 kV breaker “Wylie Ridge 216” with 63 kA breaker		APS (100%)
b2214	Albright Substation: Install a new control building in the switchyard and relocate controls and SCADA equipment from the generating station building the new control center		APS (100%)
b2215	Rivesville Switching Station: Relocate controls and SCADA equipment from the generating station building to new control building		APS (100%)

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

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

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2433.1	Install breaker and a half 138 kV substation (Waldo Run) with 4 breakers to accommodate service to MarkWest Sherwood Facility including metering which is cut into Glen Falls Lamberton 138 kV line		APS (100%)
b2433.2	Install a 70 MVAR SVC at the new WaldoRun 138 kV substation		APS (100%)
b2433.3	Install two 31.7 MVAR capacitors at the new WaldoRun 138 kV substation		APS (100%)
b2424	Replace the Weirton 138 kV breaker 'WYLIE RID210' with 63 kA breakers		APS (100%)
b2425	Replace the Weirton 138 kV breaker 'WYLIE RID216' with 63 kA breakers		APS (100%)

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

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

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2545.2	Install a ring bus station with five active positions and two 52.8 MVAR capacitors with 0.941 mH reactors		APS (100%)
b2545.3	Install a +90/-30 MVAR SVC protected by a 138 kV breaker		APS (100%)
b2545.4	Remove the 31.7 MVAR capacitor bank at Mobley 138 kV		APS (100%)
b2609.5	Terminate the Powell Mountain and Goff Run lines into the new Chloe substation and perform any associated relay upgrades or modifications required at Powell Mountain and Goff run to accommodate new		APS (100%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2672	Change CT Ratio at Seneca Caverns from 120/1 to 160/1 and adjust relay settings accordingly		APS (100%)
b2688.3	Carroll Substation: Replace the Germantown 138 kV wave trap, upgrade the bus conductor and adjust CT ratios		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%)
b2700	Remove existing Black Oak SPS		APS (100%)
b2743.6	Reconfigure the Ringgold 230 kV substation to double bus double breaker scheme		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%)

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

Required Transmission 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%)
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%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2965	Reconductor the Charleroi – Allenport 138 kV line with 954 ACSR conductor. Replace breaker risers at Charleroi and Allenport		APS (35.67%) / DL (64.33%)
b2970	Ringgold – Catoctin Solution		APS (100%)
b2970.1	Install two new 230 kV positions at Ringgold for 230/138 kV transformers		APS (100%)
b2970.2	Install new 230 kV position for Ringgold – Catoctin 230 kV line		APS (100%)
b2970.3	Install one new 230 kV breaker at Catoctin substation		APS (100%)
b2970.4	Install new 230/138 kV transformer at Catoctin substation. Convert Ringgold – Catoctin 138 kV line to 230 kV operation		APS (100%)

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

Required Transmission Enhancements		Annual 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 kV substation		See sub-IDs for cost 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%)

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

Required Transmission Enhancements	Annual Revenue Requirement		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%)
b3006	Replace four Yukon 500/138 kV transformers with three transformers with higher rating and reconfigure 500 kV bus		APS (66.42%) / DL (33.58%)
b3011.2	Upgrade terminal equipment at Yukon to increase rating on Yukon to Charleroi #2 138 kV line (New Yukon to Route 51 #4 138 kV line)		APS (28.79%) / DL (71.21%)
b3011.5	Upgrade terminal equipment at Yukon to increase rating on Yukon to Route 51 #3 138 kV line		APS (28.79%) / DL (71.21%)
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%)
b3079	Replace the Wylie Ridge 500/345 kV transformer #7		ATSI (72.30%) / DL (27.70%)
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%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3128	Relocate 34.5 kV lines from generating station roof R. Paul Smith 138 kV station		APS (100%)
b3214.1	Reconductor the Yukon – Smithton – Shepler Hill Jct 138 kV Line. Upgrade terminal equipment at Yukon and replace line relaying at Mitchell and Charleroi		APS (19.08%) / DL (80.92%)
b3214.2	Reconductor the Smithton – Shepler Hill Jct 138 kV Line		APS (11.84%) / DL (88.16%)
b3240	Upgrade Cherry Run and Morgan terminals to make the transmission line the limiting component		APS (100%)
b3241	Install 138 kV, 36 MVAR capacitor and a 5 uF reactor protected by a 138 kV capacitor switcher. Install a breaker on the 138 kV Junction terminal. Install a 138 kV 3.5 uF reactor on the existing Hardy 138 kV capacitor		APS (100%)
b3242	Reconfigure Stonewall 138 kV substation from its current configuration to a six-breaker, breaker-and-a-half layout and add two (2) 36 MVAR capacitors with capacitor switchers		APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3683	Reconductor the existing 556.5 ACSR line segments on the Messick Road – Ridgeley 138 kV line with 954 45/7 ACSR to achieve 308/376 MVA SN/SE and 349/445 MVA WN/WE ratings. Replace the remote end equipment for the line. The total length of the line is 5.02 miles	APS (100%)
b3701	Replace terminal equipment at French's Mill and Junction 138 kV substations	APS (100%)
b3717.1	Install a series reactor on Cheswick - Springdale 138 kV line	APS (8.02%) / DL (91.98%)
b3717.3	Relay work at Springdale 138 kV station	APS (100%)
b3717.4	Transmission line work – a new transmission structure and necessary tower work to handle the change in tension at Cheswick 138 kV station	APS (100%)
b3726	Install two new 500 kV breakers on the existing open SVC string to create a new bay position. Relocate & reterminate facilities as necessary to move the 500 kV SVC into the new bay position and install a 500 kV breaker on the 500/138 kV #3 transformer. Upgrade relaying at Black Oak substation	APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3743	At Bedington substation: Replace substation conductor, wave trap, Current Transformers (CT's) and upgrade relaying At Cherry Run substation: Replace substation conductor, wave trap, CT's, disconnect switches, circuit breaker and upgrade relaying At Marlowe substation: Replace substation conductor, wave trap, CT's and upgrade relaying	APS (100%)
b3746	Install redundant relaying at Meadow Brook 500 kV substation	APS (100%)
b3747	Install redundant relaying at Bedington 500 kV substation	APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3772	Reconductor 27.3 miles of the Messick Road – Morgan 138 kV line from 556 ACSR to 954 ACSR. At Messick Road substation, replace 138 kV wave trap, circuit breaker, CT's, disconnect switch, and substation conductor and upgrade relaying. At Morgan substation, upgrade relaying		APS (100%)
b3781	Replace line drops to Doubs Transformer 3. New transformer rating: 721 MVA SN / 862 MVA SE		APS (100%)
b3782	Adjust relay settings at Riverton substation on the Riverton-Bethel Tap 138 kV line		APS (100%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3796.0	Replace the Belmont 765/500 kV transformer No. 5 with a new transformer bank consisting of three single-phase transformers and an additional single phase spare transformer. The project will also replace 500 kV disconnect switches at the Belmont substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (0.28%) / APS (0.15%) / Dayton (0.10%) / DEOK (0.18%) / DL (6.57%) / Dominion (92.68%) / EKPC (0.04%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.8	Reconfigure Doubs 500 kV station and upgrade terminal equipment to new line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.16%) / BGE (0.79%) / Dominion (74.28%) / DPL (0.41%) / PECO (0.77%) / PEPCO (10.59%)
b3800.9	Rebuild the existing Hunterstown - Carroll 115/138 kV Corridor as double circuit using 230 kV construction standards. New circuit will be operated at 230 kV. Existing circuit to remain at 115/138 kV		This upgrade ID is only for tracking purpose. Cost allocation details are available from b3800.10 ~ b3800.18

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.13	Rebuild the Germantown - Carroll 138 kV line to 230 kV double circuit construction (APS - PE Section)		APS (82.49%) / ME (17.51%)
b3800.15	Construct new 230 kV Hunterstown - Carroll line (APS - PE Section)		APS (99.86%) / ME (0.14%)
b3800.16	Expand Carroll 230 kV substation to ring bus		APS (99.86%) / ME (0.14%)
b3800.17	Network upgrade at Carroll 230 kV substation		APS (99.86%) / ME (0.14%)
b3800.20	Fayetteville - Grand Point 138 kV - Replace line trap at Grand Point 138 kV station		APS (100%)
b3800.21	Reid - Ringgold 138 kV line - Replace line trap, substation conductor, breaker, relaying and CTs at Ringgold station		APS (100%)
b3800.25	Taneytown 138 kV substation terminal upgrade		APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.101	502 Junction substation two 500 kV circuit breaker expansion	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (25.59%) / BGE (9.79%) / Dominion (51.94%) / PEPCO (12.68%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.103	Rebuild approximately 16 miles of the Gore - Stonewall 138 kV line with 500 kV overbuild (502 Junction to Woodside 500 kV line section)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (25.59%) / BGE (9.79%) / Dominion (51.94%) / PEPCO (12.68%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.104	Rebuild approximately 15 miles of the Stonewall - Millville 138 kV line with 500 kV overbuild (502 Junction to Woodside 500 kV line section)	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.18%) / BGE (7.21%) / Dominion (72.52%) / PEPCO (11.09%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.105	Rebuild approximately 6 miles of the Millville - Doubs 138 kV line with 500 kV overbuild (502 Junction to Woodside 500 kV line section)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.18%) / BGE (7.21%) / Dominion (72.52%) / PEPCO (11.09%)
b3800.111	Construct the Woodside - Stonewall 138 kV No. 1 line		APS (100%)
b3800.112	Construct the Woodside - Stonewall 138 kV No. 2 line		APS (100%)
b3800.114	Stonewall 138 kV substation two 138 kV breaker expansion		APS (100%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.116	Line work for terminating Doubs to Bismark line for Doubs side at Woodside 500 kV substation (FE Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (27.49%) / BGE (9.83%) / Dominion (53.78%) / PEPCO (8.90%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.122	Rebuild 500 kV line No. 514 from Doubs - Goose Creek 500 kV line. The Doubs - Goose Creek 500 kV line will be rebuilt and the Doubs - Dickerson 230 kV will be relocated and underbuilt on the same structure		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.08%) / Dominion (99.90%) / PEPCO (0.02%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.123 Doubs substation work - Re-terminate the rebuilt Doubs - Goose Creek 500 kV line in its existing bay, terminate the new Doubs - Aspen 500 kV line in the open bay at Doubs, Replace three 500 kV breakers, Replace 500 kV terminal equipment including disconnect switches, CTs and substation conductor & Replace relaying (APS Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.08%) / Dominion (99.90%) / PEPCO (0.02%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.124	New Doubs to Aspen 500 kV line (APS Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.08%) / Dominion (99.90%) / PEPCO (0.02%)
b3800.125	Rebuild the Doubs - Dickerson 230 kV line. This will be underbuilt on the new Doubs - Goose Creek 500 kV line (APS Portion)		PEPCO (100%)
b3800.126	Rebuild the Doubs - Aqueduct 230 kV line. This will be underbuilt on the new Doubs - Aspen 500 kV line (APS Portion)		PEPCO (100%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.127	Rebuild the Dickerson - Aqueduct 230 kV line. This will be underbuilt on the new Doubs - Aspen 500 kV line (APS Portion)	PEPCO (100%)
b3800.128	Construct new Woodside – Goose Creek 500 kV line for approximately 15 miles on single circuit monopole structures within the Doubs – Goose Creek Corridor. (FE Portion)	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.26%) / BGE (7.30%) / Dominion (72.31%) / PEPCO (11.13%)
b3800.129	Construct 500 kV line from existing structure MVF1-101 on the Doubs – Millville 138 kV line around Doubs substation and into the entrance of the Doubs – Goose Creek corridor. (Approximately 2 miles)	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.26%) / BGE (7.30%) / Dominion (72.31%) / PEPCO (11.13%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.413	Replace Double Toll Gate 138 kV breaker MDT 138 OCB with a breaker rated 40 kA		APS (100%)
b3800.414	Replace Doubs 500 kV breaker DL-55 522LIN with a breaker rated 60 kA		APS (100%)
b3976.1	At Bedington: - Install foundation, conduit and grounding for new equipment. - Install three 138 kV surge arresters. - Replace one existing 138 kV CVT with three 138 kV CVTs. - Replace one lot of limiting conductor. - Install one lot of cables and grounding. - Replace one existing 138 kV Eagle line terminal relay panel and breaker failure, with one standard line relaying panel consisting of one SEL-421, one SEL-411L and one SEL-451		APS (100%)
b3977.1	At Meadow Brook: - Install conduit and grounding for new equipment. - Install one lot of cables and grounding for new equipment. - Replace one 138 kV wave trap on the West Winchester line terminal		APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3983.2	Belmont substation – Replace B-8 138 kV circuit breaker with a 63 kA, 3000A breaker. This will not affect the line ratings of the Belmont-Trissler 138 kV 604 line, which is currently rated at 176/229 SN/SE or the Belmont-Edgelawn 138 kV line, which is currently rated at 292/314 SN/SE	APS (100%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.11	Expand Black Oak Substation to accommodate the connection of the 502 Jct-Woodside 500 kV line and loop the 502 Jct-Woodside 500 kV line into the Black Oak substation by constructing ~0.85 miles of new 500 kV line into and out of Black Oak 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (8.93%) / BGE (13.63%) / Dominion (61.66%) / PEPCO (15.78%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.12	Upgrade the terminal equipment on the Doubs No. 1 500/230 kV transformer.		APS (74.10%) / PEPCO (25.90%)
b4000.13	Terminate the Woodside - Goose Creek 500 kV line into Doubs Substation, creating the Woodside - Doubs #2 500 kV Line. Remove the Chanceford-Doubs and Rocky Point-Doubs line terminations at the Doubs substation and connects the two lines through a 0.6 mile 500 kV bypass line around the Doubs substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** AEC (0.20%) / APS (0.06%) / BGE (0.71%) / Dominion (89.06%) / DPL (0.36%) / JCPL (0.33%) / ME (0.15%) / NEPTUNE* (0.03%) / PECO (0.73%) / PEPCO (7.93%) / PSEG (0.42%) / RE (0.02%)
b4000.110	Doubs Sub 500 kV - replace 50 kA breaker DL-59 No. 2CAP with 63 kA		APS (100%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4001.1	Construct the McCanns Rd. 138 kV switching station and interconnect the existing Redbud-West Winchester 138 kV line and Bartonville-Stephenson 138 kV line		~~APS (100%)~~AEP (0.57%) / APS (99.13%) / ATSI (0.01%) / BGE (0.01%) / Dominion (0.04%) / EKPC (0.21%) / PECO (0.01%) / PPL (0.01%) / PSEG (0.01%)
b4001.2	Reconductor new Redbud McCanns Rd. 138 kV line with 795 kcmil 45/7 ACSS for 0.5 miles from Redbud 138 kV substation to Str. 175 of the existing Redbud-West Winchester 138 kV line at approximate coordinates (39.217478, -78.128621)		~~APS (100%)~~ AEP (0.57%) / APS (99.13%) / ATSI (0.01%) / BGE (0.01%) / Dominion (0.04%) / EKPC (0.21%) / PECO (0.01%) / PPL (0.01%) / PSEG (0.01%)
b4002.1	Rebuild approximately 1.9 miles of 115 kV line with larger conductor. -Install OPGW for the static. -Install one new SCADA-controlled 2000A disconnect with whips		~~APS (100%)~~ AEC (2.49%) / AEP (0.95%) / APS (5.63%) / ATSI (16.98%) / BGE (0.94%) / ComEd (1.50%) / Dayton (0.33%) / DEOK (0.59%) / DL (0.06%) / Dominion (24.05%) / DPL (0.21%) / EKPC (0.56%) / JCPL (3.22%) / ME (4.42%) / NEPTUNE* (0.35%) / OVEC (0.02%) / PECO (7.48%) / PENELEC (16.66%) / PEPCO (5.40%) / PPL (4.25%) / PSEG (3.77%) / RE (0.14%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4002.2	Adjust the relay settings at Penn Mar, Garrett and Deep Creek substations to accommodate the new ratings and impedance changes associates with the Garrett-Garrett tap 115 kV line rebuild		AEC (2.49%) / AEP (0.95%) / APS (5.63%) / ATSI (16.98%) / BGE (0.94%) / ComEd (1.50%) / Dayton (0.33%) / DEOK (0.59%) / DL (0.06%) / Dominion (24.05%) / DPL (0.21%) / EKPC (0.56%) / JCPL (3.22%) / ME (4.42%) / NEPTUNE* (0.35%) / OVEC (0.02%) / PECO (7.48%) / PENELEC (16.66%) / PEPCO (5.40%) / PPL (4.25%) / PSEG (3.77%) / RE (0.14%)~~PENELEC (100%)~~

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4037.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5-APS25	APS (100%)
b4038.1	2024W1 P5: Modify relay wiring: Addressing FG No. 2024-P5-APS02	APS (100%)
b4039.1	2024W1 P5: Replace 3 relay panels & modify relay wiring. Addresses FG No. 2024-P5-APS24	APS (100%)
b4039.2	2024W1 P5: Replace 1 relay panel at a confidential substation connected to the substation associated with b4039.1. Addresses FG No. 2024-P5-APS24	APS (100%)
b4039.3	2024W1 P5: Replace 1 relay panel at a confidential substation connected to the substation associated with b4039.1. Addresses FG No. 2024-P5-APS24	APS (100%)
b4039.4	2024W1 P5: Replace 1 relay panel at a confidential substation connected to the substation associated with b4039.1. Addresses FG No. 2024-P5-APS24	APS (100%)
b4040.1	2024W1 P5: Install battery monitoring, DC panel, and modify relay wiring: Addressing FG No. 2024-P5-APS03	APS (100%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4057.1	2024W1 P5: Install relay panel and modify relay wiring: Addressing FG No. 2024-P5-APS06		APS (100%)
b4060.1	2024W1 P5: Install open battery monitoring, install relay panel, modify relay wiring: Addressing FG No. 2024-P5-APS01		APS (100%)
b4061.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5-APS05		APS (100%)
b4062.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5-APS08		APS (100%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4063.1	2024W1 P5: Install battery monitoring, DC panel(s), replace bus differential scheme, and modify relay wiring: Addressing FG No. 2024-P5-APS22		APS (100%)
b4064.1	2024W1 P5: Install battery monitoring, relay panels, and modify relay wiring: Addressing FG No. 2024-P5-APS23		APS (100%)

SCHEDULE 12 – APPENDIX A

(15) Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc.

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2141.1	Remove Byron SPS upon completion of Byron - Wayne 345 kV		ComEd (100%)
b2365	Replace 138 kV bus tie 1-2 circuit breaker, station conductor, relays, and a wave trap at TSS 55 Hegewisch substation		ComEd (100%)
b2366	Reconductor 1.4 miles of 138 kV line 0112, Kickapoo Creek - LaSalle County 138kV line		ComEd (100%)
b2415	Install a 138 kV Red Blue bus tie with underground cable and a line 15913 CB at Highland Park		ComEd (100%)
b2416	Reconductor 0.125 miles of the East Frankfort - Mokena 138 kV line L6604		ComEd (100%)
b2417	Replace Ridgeland 138 kV bus tie CB and underground cable at TSS 192 Ridgeland 138 kV substation		ComEd (100%)
b2418	Reconductor 7.5 miles of Waukegan - Gurnee 138 kV line L1607		ComEd (100%)
b2419	Reconductor 0.33 miles of 138 kV underground cable on the Sawyer - Crawford 138 kV Blue line (L1324)		ComEd (100%)
b2465	Replace the Skokie 138 kV breaker ’88 L8809’ with a 63 kA breaker		ComEd (100%)
b2466	Replace the Skokie 138 kV breaker ’88 L8810’ with 63kA breaker		ComEd (100%)
b2467	Replace the Skokie 138 kV breaker ’88 L11416’ with 63 kA breaker		ComEd (100%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2468	Replace the Skokie 138 kV breaker '88 L8803' with 63kA breaker		ComEd (100%)
b2469	Replace the Des Plaines 138 kV breaker '46 11702' with 63 kA breaker		ComEd (100%)
b2561	Install a new 345 kV circuit breaker 5-7 at Elwood substation		ComEd (100%)
b2562	Remove 2.0 miles of wood poles on 138 kV line 17105, erect new steel structures, and install new 1113 kcmil ACSR conductor from Roscoe Bert to Harlem		ComEd (100%)
b2613	Replace relays at Mazon substation		ComEd (100%)
b2692.1	Replace station equipment at Nelson, ESS H-471 and Quad Cities		AEC (0.18%) / AEP (18.68%) / APS (5.86%) / ATSI (7.85%) / BGE (3.32%) / ComEd (38.21%) / Dayton (2.76%) / DEOK (4.13%) / DL (2.23%) / Dominion (5.15%) / DPL (1.97%) / EKPC (1.36%) / HTP (0.05%) / JCPL (0.52%) / MetED (0.04%) / Neptune (0.04%) / PECO (1.08%) / PENELEC (1.25%) / PEPCO (3.56%) / PPL (0.45%) / PSEG (1.17%) / RECO (0.14%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2692.2	Upgrade conductor ratings of Cordova – Nelson, Quad Cities – ESS H-471 and ESS H-471 – Nelson 345 kV lines and mitigating sag limitations		AEC (0.18%) / AEP (18.68%) / APS (5.86%) / ATSI (7.85%) / BGE (3.32%) / ComEd (38.21%) / Dayton (2.76%) / DEOK (4.13%) / DL (2.23%) / Dominion (5.15%) / DPL (1.97%) / EKPC (1.36%) / HTP (0.05%) / JCPL (0.52%) / MetED (0.04%) / Neptune (0.04%) / PECO (1.08%) / PENELEC (1.25%) / PEPCO (3.56%) / PPL (0.45%) / PSEG (1.17%) / RECO (0.14%)
b2693	Replace L7815 B phase line trap at Wayne substation		ComEd (100%)
b2699.1	Replace 5 Powerton 345 kV CB's with 2 cycle IPO breakers, install one new 345 kV CB; swap line 0302 and line 0303 bus positions; reconfigure Powerton 345 kV bus as single ring configuration		ComEd (100%)
b2699.2	Remove SPS logic at Powerton that trips generators or sectionalizes bus under normal conditions; minimal SPS logic will remain		ComEd (100%)
b2721	Goodings Grove – Balance Station Load (swap bus positions for 345 kV lines 1312 & 11620 and 345 kV lines 11604 & 11622) and replace 138 kV bus tie 2-3		ComEd (100%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2728	Mitigate sag limitations on Loretto – Wilton Center 345 kV Line and replace station conductor at Wilton Center		ATSI (3.43%) / AEP (3.34%) / ComEd (92.02%) / DLCO (1.21%)
b2732.1	Cut-in of line 93505 Tazewell – Kendall 345 kV line into Dresden		ComEd (100%)
b2732.2	Raise towers to remove the sag limitations on Pontiac – Loretto 345 kV line		ComEd (100%)
b2751	Rebuild/Resag the H440 - H440 Tap 138 kV line 16914-2 (Hays Road - SW 1403 138 kV)		ComEd (100%)
b2930	Upgrade capacity on E. Frankfort – University Park 345 kV		ComEd (100%)
b2931	Upgrade substation equipment at Pontiac Midpoint station to increase capacity on Pontiac – Brokaw 345 kV line		ComEd (100%)
b2941	Build an indoor new Elk Grove 138 kV GIS substation at the point where Rolling Meadows & Schaumburg tap off from the main lines, between Landmeier and Busse. The four 345 kV circuits in the ROW will be diverted into Gas Insulated Bus (GIB) and go through the basement of the building to provide clearance for the above ground portion of the building		ComEd (100%)
b2959	Install a new 138 kV circuit 18702 from Schauff Road to Rock Falls and install a fourth breaker and a half run at Schauff Road		ComEd (100%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2995	Remove Davis Creek RAS		ComEd (100%)
b2997	Remove University Park North RAS		ComEd (100%)
b2998	Install a 120 MVAR 345 kV shunt inductor at Powerton (the 345 kV yard already contains an empty bus position on the ring we only need a switching breaker for the inductor)		ComEd (100%)
b2999	Rebuild the 12.36 mile Schauff Road to Nelson tap 138 kV line L15508		ComEd (100%)
b3049	Replace 345 kV breaker at Joliet substation		ComEd (100%)
b3111	Install high-speed backup clearing scheme on the E. Frankfort – Matteson 138 kV line (L6603)		ComEd (100%)
b3147	Modify 138 kV blue bus total clearing times at TSS 111 Electric Junction to eleven (11) cycles for fault on 345/138 kV Transformer 81, and to thirteen (13) cycles for faults on 138 kV Line #11106, 138 kV Line #11102 and 345/138 kV Transformer 82		ComEd (100%)
b3317	Modify backup relay clearing times at the 138 kV STA16 Waukegan station		ComEd (100%)
b3677	Rebuild a 13 mile section of 138 kV line between LaSalle and Mazon stations with 1113 ACSR or higher rated conductor		ComEd (100%)
b3711	Install 345 kV bus tie 5-20 circuit breaker in the ring at Dresden station in series with existing bus tie 5-6		ComEd (100%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3760	At Powerton substation, replace most limiting facility 800A wave trap with 2000A wave trap on the Powerton – Towerline 138 kV line terminal		AEC (0.93%) / AEP (13.17%) / APS (5.41%) / ATSI (6.91%) / BGE (3.21%) / Dayton (1.80%) / DEOK (2.68%) / DL (1.38%) / Dominion (10.80%) / DPL (1.92%) / ECP (0.14%) / EKPC (1.40%) / HTP (0.12%) / JCPL (2.22%) / ME (1.68%) / Neptune (0.50%) / OVEC (0.02%) / PECO (4.06%) / PENELEC (2.17%) / PEPCO (3.37%) / PPL (3.41%) / PSEG (4.18%) / RE (0.14%) / MISO (28.38%)
b3775.3	Rebuild ComEd's section of 345 kV double circuit in IL from St. John to Crete (5 miles) with twin bundled 1277 ACAR conductor		**Reliability Driver:** ComEd (100.00%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

*Neptune Regional Transmission System, LLC
**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3775.4	Rebuild 12.7 miles of 345 kV double circuit extending from Crete to E. Frankfort with twin bundled 1277 ACAR conductor		**Reliability Driver:** ComEd (100%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)
b3775.5	Replace E. Frankfort 345 kV circuit breaker "9-14" with 3150A SF6 circuit breaker		**Reliability Driver:** ComEd (100%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

*Neptune Regional Transmission System, LLC
**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3810.0	Add three 345 kV circuit breakers to Cherry Valley substation		ComEd (100%)
b3811.1	Expand Haumesser Road 138 kV substation as a 4 circuit breaker ring bus		ComEd (100%)
b3811.2	Add one 138 kV circuit breaker at H-452 to complete a three circuit breaker ring bus		ComEd (100%)
b3811.3	Rebuild 3 miles of 138 kV Line 11323 from Haumesser Road to the H-452 tap with double circuit towers. Cut the H-452 tap over to the 2nd circuit from Haumesser Road. Both circuits to use twisted pair 556 ACSR Parakeet conductor		ComEd (100%)
b3812.1	Reconductor 345 kV Line 11620 and 11622 from Elwood to Goodings Grove		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)

*Neptune Regional Transmission System, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3812.2	Upgrade Goodings Grove 345 kV circuit breakers, disconnects, and associated equipment		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)
b3812.3	Upgrade station conductor at Elwood 345 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)

*Neptune Regional Transmission System, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3812.4	Adjust reclosing cycle on for Goodings Grove 345 kV circuit breaker '116 9806' to eliminate the reclosing de-rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)
b3900.1	Replace 300 copper conductor with 1113 kcmil ACSR conductor on Kewanee 138 kV Bus No. 1		ComEd (100%)
b3901.1	Reconductor 138 kV line from Electric Junction to W541		ComEd (100%)
b3901.2	Replace 2" tubular bus, 2-500 KCMIL Cu and 1113 KCMIL ACSR/AA on bus 2 and line terminal of 138 kV L11106 at TSS 111 Electric Junction with bus that meets or exceeds a minimum thermal capability of 2036/2236/2690A (487/534/643 MVA) SN/SE/SLD		ComEd (100%)
b3902.1	Replace the Wilton Center 345 kV BT 4-5 circuit breaker		ComEd (100%)

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Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3903.1	Replace the Kewannee 138 kV kV L7411 circuit breaker with a SF6 63 kA circuit breaker		ComEd (100%)
b3914.1	Change No-load Tap of 2 Autotransformers at Fisk from 338.25 kV to 346.5 kV		ComEd (100%)
b3914.2	Change No-load Tap of 4 Autotransformers at Crawford from 338.25 kV to 346.5 kV		ComEd (100%)
b3914.3	Change No-load Tap of 3 Autotransformers at Elmhurst from 338.25 kV to 346.5 kV		ComEd (100%)
b3914.4	Change No-load Tap of 2 Autotransformers at West Loop from 338.25 kV to 346.5 kV		ComEd (100%)
b3914.5	Change No-load Tap of 2 Autotransformers at Taylor from 338.25 kV to 346.5 kV		ComEd (100%)
b3914.6	Change No-load Tap of 4 Autotransformers at Skokie from 338.25 kV to 346.5 kV		ComEd (100%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3915.1	Reconductor 1.5 miles of 345 kV lines 1202 and 1227 from Dresden to Mulberry with two conductor bundled 1033.5 ACSS conductor. Modify and replace towers as necessary to accommodate the higher mechanical loads of the bundled conductor		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)
b3915.2	Install 345 kV circuit breaker on line 1202 (Dresden-Mulberry 345 kV) and upgrade disconnects and associated equipment at Dresden 345 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)

*Neptune Regional Transmission System, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3915.3	Upgrade disconnects and associated equipment at Mulberry 345 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)
b3916.1	Install a new 420 MVA 345/138 kV autotransformer and associated 345 kV and 138 kV circuit breakers at Itasca substation		ComEd (100%)
b3943.1	Install a new 345/138 kV transformer TR 84, and associated equipment at State Line substation. Install two 345 kV circuit breakers, one 138 kV circuited breaker and associated equipment, also replace the 138 kV BT 732 circuit breaker at State Line substation.		ComEd (100%)
b3981.1	Install a new 345/138 kV TR83 at Elk Grove and associated equipment. Install three 138 kV and one 345 kV circuit breakers and associated equipment at Elk Grove substation.		ComEd (100%)

*Neptune Regional Transmission System, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3982.1	Disconnect and remove the 34 kV tertiary cap bank on the Cherry Valley 345/138 kV transformer TR 82 and install a 138 kV bus 3 cap bank and associated equipment at Cherry Valley substation.		ComEd (100%)
b4006.1	Install 765/345 kV TR 91 and associated 765 kV and 345 kV circuit breakers at Wilton Center.		~~ComEd (100%)~~AEC (0.91%) / AEP (23.52%) / APS (0.01%) / ATSI (16.14%) / BGE (1.85%) / ComEd (0.11%) / Dayton (6.51%) / DEOK (5.89%) / DL (3.76%) / Dominion (28.49%) / DPL (1.37%) / JCPL (2.21%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.15%) / PENELEC (0.19%) / PEPCO (1.46%) / PSEG (4.03%) / RE (0.15%)
b4025.1	Build new 28-mile transmission line from Mendota to Sandwich.		ComEd (100%)
b4025.2	Convert Mendota straight bus to ring by installing four new 138 kV circuit breakers.		ComEd (100%)
b4025.3	Install 138 kV BT circuit breaker and associated equipment at Sandwich.		ComEd (100%)

*Neptune Regional Transmission System, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4073.1	2024W1 P5: Install battery monitoring: Addressing FG No. 2024-P5-COMED01.		ComEd (100%)
b4073.2	2024W1 P5: Install battery monitoring: Addressing FG No. 2024-P5-COMED30.		ComEd (100%)
b4073.3	Install battery monitoring: Addressing FG No. 2024-P5-COMED28.		ComEd (100%)
b4073.4	2024W1 P5: Install battery monitoring: Addressing FG No. 2024-P5-COMED31.		ComEd (100%)
b4073.5	2024W1 P5: Install battery monitoring: Addressing FG No. 2024-P5-COMED29.		ComEd (100%)
b4073.6	Install battery monitoring: Addressing FG No. 2024-P5-COMED14.		ComEd (100%)

SCHEDULE 12 – APPENDIX A

(17) American Electric Power Service Corporation on behalf of its affiliate companies: AEP Appalachian Transmission Company, Inc.; AEP Indiana Michigan Transmission Company, Inc.; AEP Kentucky Transmission Company, Inc.; AEP Ohio Transmission Company, Inc.; AEP West Virginia Transmission Company, Inc.; Appalachian Power Company; Indiana Michigan Power Company; Kentucky Power Company; Kingsport Power Company; Ohio Power Company and Wheeling Power Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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 (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (94.88%) / DEOK (3.79%) / EKPC (1.33%)

*Neptune Regional Transmission System, LLC

American Electric Power Service Corporation on behalf of its affiliate companies: AEP Appalachian Transmission Company, Inc.; AEP Indiana Michigan Transmission Company, Inc.; AEP Kentucky Transmission Company, Inc.; AEP Ohio Transmission Company, Inc.; AEP West Virginia Transmission Company, Inc.; Appalachian Power Company; Indiana Michigan Power Company; Kentucky Power Company; Kingsport Power Company; Ohio Power Company and Wheeling Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1797.1	Reconductor the AEP portion of the Cloverdale - Lexington 500 kV line with 2-1780 ACSS	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
		DFAX Allocation: AEP (6.65%) / Dayton (1.00%) / DEOK (2.17%) / EKPC (0.76%) / OVEC (0.02%) / PEPCO (89.40%)
b2055	Upgrade relay at Brues station	AEP (100%)
b2122.3	Upgrade terminal equipment at Howard on the Howard - Brookside 138 kV line to achieve ratings of 252/291 (SN/SE)	AEP (100%)
b2122.4	Perform a sag study on the Howard - Brookside 138 kV line	AEP (100%)
b2229	Install a 300 MVAR reactor at Dequine 345 kV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2230	Replace existing 150 MVAR reactor at Amos 765 kV substation on Amos - N. Proctorville - Hanging Rock with 300 MVAR reactor		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEP (100%)
b2231	Install 765 kV reactor breaker at Dumont 765 kV substation on the Dumont - Wilton Center line		AEP (100%)
b2232	Install 765 kV reactor breaker at Marysville 765 kV substation on the Marysville - Maliszewski line		AEP (100%)
b2233	Change transformer tap settings for the Baker 765/345 kV transformer		AEP (100%)
b2252	Loop the North Muskingum - Crooksville 138 kV line into AEP's Philo 138 kV station which lies approximately 0.4 miles from the line		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2253	Install an 86.4 MVAR capacitor bank at Gorsuch 138 kV station in Ohio		AEP (100%)
b2254	Rebuild approximately 4.9 miles of Corner - Degussa 138 kV line in Ohio		AEP (100%)
b2255	Rebuild approximately 2.8 miles of Maliszewski - Polaris 138 kV line in Ohio		AEP (100%)
b2256	Upgrade approximately 36 miles of 138 kV through path facilities between Harrison 138 kV station and Ross 138 kV station in Ohio		AEP (100%)
b2257	Rebuild the Pokagon - Corey 69 kV line as a double circuit 138 kV line with one side at 69 kV and the other side as an express circuit between Pokagon and Corey stations		AEP (100%)
b2258	Rebuild 1.41 miles of #2 CU 46 kV line between Tams Mountain - Slab Fork to 138 kV standards. The line will be strung with 1033 ACSR		AEP (100%)
b2259	Install a new 138/69 kV transformer at George Washington 138/69 kV substation to provide support to the 69 kV system in the area		AEP (100%)

American Electric Power Service Corporation on behalf of its affiliate companies: AEP Appalachian Transmission Company, Inc.; AEP Indiana Michigan Transmission Company, Inc.; AEP Kentucky Transmission Company, Inc.; AEP Ohio Transmission Company, Inc.; AEP West Virginia Transmission Company, Inc.; Appalachian Power Company; Indiana Michigan Power Company; Kentucky Power Company; Kingsport Power Company; Ohio Power Company and Wheeling Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2286	Rebuild 4.7 miles of Muskingum River - Wolf Creek 138 kV line and remove the 138/138 kV transformer at Wolf Creek Station		AEP (100%)
b2287	Loop in the Meadow Lake - Olive 345 kV circuit into Reynolds 765/345 kV station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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%)
b2345.2	Rebuild the 34.5 kV lines between Keeler - Sister Lakes and Glenwood tap switch to 69 kV (~12 miles)		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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 138 kV circuit		AEP (100%)
b2375	Change the existing CT ratios of the existing equipment along East Danville-Banister 138 kV circuit		AEP (100%)

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Required Transmission Enhancements		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%)

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Required Transmission Enhancements		Annual 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 (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEP (100%)

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Required Transmission Enhancements		Annual 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%)

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

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

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2591	Construct a new 69 kV line approximately 2.5 miles from Colfax to Drewry's. Construct a new Drewry's station and install a new circuit breaker at Colfax station.		AEP (100%)
b2592	Rebuild existing East Coshocton – North Coshocton double circuit line which contains Newcomerstown – N. Coshocton 34.5 kV Circuit and Coshocton – North Coshocton 69 kV circuit		AEP (100%)
b2593	Rebuild existing West Bellaire – Glencoe 69 kV line with 138 kV & 69 kV circuits and install 138/69 kV transformer at Glencoe Switch		AEP (100%)
b2594	Rebuild 1.0 mile of Brantley – Bridge Street 69 kV Line with 1033 ACSR overhead conductor		AEP (100%)
b2595.1	Rebuild 7.82 mile Elkhorn City – Haysi S.S 69 kV line utilizing 1033 ACSR built to 138 kV standards		AEP (100%)
b2595.2	Rebuild 5.18 mile Moss – Haysi SS 69 kV line utilizing 1033 ACSR built to 138 kV standards		AEP (100%)
b2596	Move load from the 34.5 kV bus to the 138 kV bus by installing a new 138/12 kV XF at New Carlisle station in Indiana		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2597	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		AEP (100%)
b2598	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		AEP (100%)
b2599	Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap		AEP (100%)
b2600	Rebuild Fremont – Pound line as 138 kV		AEP (100%)
b2601	Fremont Station Improvements		AEP (100%)
b2601.1	Replace MOAB towards Beaver Creek with 138 kV breaker		AEP (100%)
b2601.2	Replace MOAB towards Clinch River with 138 kV breaker		AEP (100%)
b2601.3	Replace 138 kV Breaker A with new bus-tie breaker		AEP (100%)
b2601.4	Re-use Breaker A as high side protection on transformer #1		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2601.5	Install two (2) circuit switchers on high side of transformers # 2 and 3 at Fremont Station	AEP (100%)
b2602.1	Install 138 kV breaker E2 at North Proctorville	AEP (100%)
b2602.2	Construct 2.5 Miles of 138 kV 1033 ACSR from East Huntington to Darrah 138 kV substations	AEP (100%)
b2602.3	Install breaker on new line exit at Darrah towards East Huntington	AEP (100%)
b2602.4	Install 138 kV breaker on new line at East Huntington towards Darrah	AEP (100%)
b2602.5	Install 138 kV breaker at East Huntington towards North Proctorville	AEP (100%)
b2603	Boone Area Improvements	AEP (100%)
b2603.1	Purchase approximately a 200X300 station site near Slaughter Creek 46 kV station (Wilbur Station)	AEP (100%)
b2603.2	Install 3 138 kV circuit breakers, Cabin Creek to Hernshaw 138 kV circuit	AEP (100%)
b2603.3	Construct 1 mi. of double circuit 138 kV line on Wilbur – Boone 46 kV line with 1590 ACSS 54/19 conductor @ 482 Degree design temp. and 1-159 12/7 ACSR and one 86 Sq.MM. 0.646" OPGW Static wires	AEP (100%)
b2604	Bellefonte Transformer Addition	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2604.1	Remove approximately 11.32 miles of the 69 kV line between Millbrook Park and Franklin Furnace		AEP (100%)
b2604.2	At Millbrook Park station, add a new 138/69 kV Transformer #2 (90 MVA) with 3000 A 40 kA breakers on the high and low side. Replace the 600 A MOAB switch and add a 3000 A circuit switcher on the high side of Transformer #1		AEP (100%)
b2604.3	Replace Sciotoville 69 kV station with a new 138/12 kV in-out station (Cottrell) with 2000 A line MOABs facing Millbrook Park and East Wheelersburg 138 kV station		AEP (100%)
b2604.4	Tie Cottrell switch into the Millbrook Park – East Wheelersburg 138 kV circuit by constructing 0.50 mile of line using 795 ACSR 26/7 Drake (SE 359 MVA)		AEP (100%)
b2604.5	Install a new 2000 A 3-way PoP switch outside of Texas Eastern 138 kV substation (Sadiq switch)		AEP (100%)
b2604.6	Replace the Wheelersburg 69 kV station with a new 138/12 kV in-out station (Sweetgum) with a 3000 A 40 kA breaker facing Sadiq switch and a 2000 A 138 kV MOAB facing Althea		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2604.7	Build approximately 1.4 miles of new 138 kV line using 795 ACSR 26/7 Drake (SE 359 MVA) between the new Sadiq switch and the new Sweetgum 138 kV station	AEP (100%)
b2604.8	Remove the existing 69 kV Hayport Road switch	AEP (100%)
b2604.9	Rebuild approximately 2.3 miles along existing Right-Of-Way from Sweetgum to the Hayport Road switch 69 kV location as 138 kV single circuit and rebuild approximately 2.0 miles from the Hayport Road switch to Althea 69 kV with double circuit 138 kV construction, one side operated at 69 kV to continue service to K.O. Wheelersburg, using 795 ACSR 26/7 Drake (SE 359 MVA)	AEP (100%)
b2604.10	Build a new station (Althea) with a 138/69 kV, 90 MVA transformer. The 138 kV side will have a single 2000 A 40 kA circuit breaker and the 69 kV side will be a 2000 A 40 kA three breaker ring bus	AEP (100%)
b2604.11	Remote end work at Hanging Rock, East Wheelersburg and North Haverhill 138 kV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2605	Rebuild and reconductor Kammer – George Washington 69 kV circuit and George Washington – Moundsville ckt #1, designed for 138 kV. Upgrade limiting equipment at remote ends and at tap stations	AEP (100%)
b2606	Convert Bane – Hammondsville from 23 kV to 69 kV operation	AEP (100%)
b2607	Pine Gap Relay Limit Increase	AEP (100%)
b2608	Richlands Relay Upgrade	AEP (100%)
b2609.1	Install two 138 kV MOAB switches at Thorofare Creek substation and one 138 kV breaker at Clendenin substation	AEP (100%)
b2609.3	Terminate the Flatwood, Kanawha River and Capitol Hill lines into the new Coco substation	AEP (100%)
b2610	Rebuild Pax Branch – Scaraboro as 138 kV	AEP (100%)
b2611	Skin Fork Area Improvements	AEP (100%)
b2611.1	New 138/46 kV station near Skin Fork and other components	AEP (100%)
b2611.2	Construct 3.2 miles of 1033 ACSR double circuit from new Station to cut into Sundial-Baileysville 138 kV line	AEP (100%)
b2634.1	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-Tanners Creek 345 kV line)	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2643	Replace the Darrah 138 kV breaker 'L' with 40 kA 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%)
b2668.1	Replace the bus/risers at Dequine 345 kV station		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%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2687.1	Install a +/- 450 MVAR SVC at Jacksons Ferry 765 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2687.2	Install a 300 MVAR shunt line reactor on the Broadford end of the Broadford – Jacksons Ferry 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (100%)
b2697.1	Mitigate violations identified by sag study to operate Fieldale-Thornton-Franklin 138 kV overhead line conductor at its max. operating temperature. 6 potential line crossings to be addressed		AEP (100%)
b2697.2	Replace terminal equipment at AEP's Danville and East Danville substations to improve thermal capacity of Danville – East Danville 138 kV circuit		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)
b2701.3	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 80 kA breakers		AEP (100%)

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

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2753.3	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		AEP (100%)
b2753.6	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		AEP (100%)
b2753.7	Retire line sections (Dilles Bottom – Bellaire and Moundsville – Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line corridor, near "Point A". Tie George Washington – Moundsville 69 kV circuit to George Washington – West Bellaire 69 kV circuit		AEP (100%)
b2753.8	Rebuild existing 69 kV line as double circuit from George Washington – Dilles Bottom 138 kV. One circuit will cut into Dilles Bottom 138 kV initially and the other will go past with future plans to cut in		AEP (100%)

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Required Transmission Enhancements		Annual 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		AEP (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%)

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Required Transmission 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%)
b2779.6	Construct a 345 kV ring bus at Dunton Lake to serve Steel Dynamics, Inc. (SDI) load at 345 kV via two (2) circuits		AEP (100%)
b2779.7	Retire Collingwood 345 kV station		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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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%)
b2789	Rebuild the Brues - Glendale Heights 69 kV line section (5 miles) with 795 ACSR (128 MVA rating, 43% loading)		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2790	Install a 3 MVAR, 34.5 kV cap bank at Caldwell substation		AEP (100%)
b2791	Rebuild Tiffin – Howard, new transformer at Chatfield		AEP (100%)
b2791.1	Rebuild portions of the East Tiffin - Howard 69 kV line from East Tiffin to West Rockaway Switch (0.8 miles) using 795 ACSR Drake conductor (129 MVA rating, 50% loading)		AEP (100%)
b2791.2	Rebuild Tiffin - Howard 69 kV line from St. Stephen's Switch to Hinesville (14.7 miles) using 795 ACSR Drake conductor (90 MVA rating, non-conductor limited, 38% loading)		AEP (100%)
b2791.3	New 138/69 kV transformer with 138/69 kV protection at Chatfield		AEP (100%)
b2791.4	New 138/69 kV protection at existing Chatfield transformer		AEP (100%)
b2792	Replace the Elliott transformer with a 130 MVA unit, reconductor 0.42 miles of the Elliott – Ohio University 69 kV line with 556 ACSR to match the rest of the line conductor (102 MVA rating, 73% loading) and rebuild 4 miles of the Clark Street – Strouds R		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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Required Transmission Enhancements		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)		**DFAX Allocation:** AEP (35.19%) / Dayton (33.38%) / DEOK (31.43%)
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		**DFAX Allocation:** AEP (43.18%) / ATSI (38.14%) / Dayton (18.68%)
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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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

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Required Transmission Enhancements		Annual Revenue Requirement	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%)

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

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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 80 kA breaker		AEP (100%)
b3001	Replace South Canton 138 kV breaker 'N1' with an 80 kA breaker		AEP (100%)
b3002	Replace South Canton 138 kV breaker 'N2' with an 80 kA 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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3086.3	Rebuild West Melrose – Whirlpool 34 kV line Str's 55–80 (1 mile), utilizing 795 26/7 ACSR conductor		AEP (100%)
b3086.4	North Findlay station: Install a 138 kV 3000A 63 kA line breaker and low side 34.5 kV 2000A 40 kA breaker, high side 138 kV circuit switcher on T1		AEP (100%)
b3086.5	Ebersole station: Install second 90 MVA 138/69/34 kV transformer. Install two low side (69 kV) 2000A 40 kA breakers for T1 and T2		AEP (100%)
b3087.1	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 40 kA 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		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 – Cedar Creek 138 kV circuit		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3087.3	Remote end work will be required at Cedar Creek Station		AEP (100%)
b3087.4	Install 28.8 MVAR switching shunt at the new Fords Branch substation		AEP (100%)
b3095	Rebuild Lakin – Racine Tap 69 kV line section (9.2 miles) to 69 kV standards, utilizing 795 26/7 ACSR conductor		AEP (100%)
b3099	Install a 138 kV 3000A 40 kA circuit switcher on the high side of the existing 138/34.5 kV transformer No.5 at Holston station		AEP (100%)
b3100	Replace the 138 kV MOAB switcher "YY" with a new 138 kV circuit switcher on the high side of Chemical transformer No.6		AEP (100%)
b3101	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 556 ACSR conductor and upgrade existing relay trip limit (WN/WE: 63 MVA, line limited by remaining conductor sections)		AEP (100%)
b3102	Replace existing 50 MVA 138/69 kV transformers #1 and #2 (both 1957 vintage) at Fremont station with new 130 MVA 138/69 kV transformers		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3103.1	Install a 138/69 kV transformer at Royerton station. Install a 69 kV bus with one 69 kV breaker toward Bosman station. Rebuild the 138 kV portion into a ring bus configuration built for future breaker and a half with four 138 kV breakers		AEP (100%)
b3103.2	Rebuild the Bosman/Strawboard station in the clear across the road to move it out of the flood plain and bring it up to 69 kV standards		AEP (100%)
b3103.3	Retire 138 kV breaker L at Delaware station and re-purpose 138 kV breaker M for the Jay line		AEP (100%)
b3103.4	Retire all 34.5 kV equipment at Hartford City station. Re-purpose breaker M for the Bosman line 69 kV exit		AEP (100%)
b3103.5	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 the 69 kV portion of this station as a 6 breaker ring bus re-using the 2 existing 69 kV breakers. Install a new 138/69 kV transformer		AEP (100%)

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

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Required Transmission Enhancements		Annual Revenue Requirement	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 re-terminating 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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3118.5	Terminate the Bellefonte – Grangston 138 kV circuit to the Chadwick 138 kV bus		AEP (100%)
b3118.6	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		AEP (100%)
b3118.7	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		AEP (100%)
b3118.8	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		AEP (100%)
b3118.9	Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor		AEP (100%)
b3118.10	Replace 69 kV line risers (towards Chadwick) at Leach station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3119.1	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 North Portland station		AEP (100%)
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%)
b3131.1	Rebuild approximately 12.3 miles of remaining Lark conductor on the double circuit line between Haviland and East Lima with 1033 54/7 ACSR conductor		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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3141	Rebuild the Knox Creek – Coal Creek 69 kV line (approx. 2.9 miles)		AEP (100%)
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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3151.11	Rebuild Columbia station in the clear as a 138/69 kV station with two (2) 138/69 kV transformers and 4-breaker ring buses on the high and low side. Station will reuse 69 kV breakers "J" & "K" and 138 kV breaker "D"		AEP (100%)
b3151.12	Rebuild the 13 miles of the Columbia – Richland 69 kV line		AEP (100%)
b3151.13	Rebuild the 0.5 mile Whitley – Columbia City No.1 line as 69 kV		AEP (100%)
b3151.14	Rebuild the 0.5 mile Whitley – Columbia City No.2 line as 69 kV		AEP (100%)
b3151.15	Rebuild the 0.6 mile double circuit section of the Rob Park – South Hicksville / Rob Park – Diebold Road as 69 kV		AEP (100%)
b3160.1	Construct an approx. 2.4 miles double circuit 138 kV extension using 1033 ACSR (Aluminum Conductor Steel Reinforced) to connect Lake Head to the 138 kV network		AEP (100%)
b3160.2	Retire the approx.2.5 miles 34.5 kV Niles – Simplicity Tap line		AEP (100%)
b3160.3	Retire the approx.4.6 miles Lakehead 69 kV Tap		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3208	Retire approximately 38 miles of the 44 mile Clifford – Scottsville 46 kV circuit. 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 from Joshua Falls – Riverville (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)		AEP (100%)
b3209	Rebuild the 10.5 mile Berne – South Decatur 69 kV line using 556 ACSR		AEP (100%)
b3210	Replace approx. 0.7 mile Beatty – Galloway 69 kV line with 4000 kcmil XLPE cable		AEP (100%)
b3220	Install 14.4 MVAR capacitor bank at Whitewood 138 kV		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3243	Replace risers at the Bass 34.5 kV station		AEP (100%)
b3244	Rebuild approximately 9 miles of the Robinson Park – Harlan 69 kV line		AEP (100%)
b3248	Install a low side 69 kV circuit breaker at the Albion 138/69 kV transformer #1		AEP (100%)
b3249	Rebuild the Chatfield – Melmore 138 kV line (approximately 10 miles) to 1033 ACSR conductor		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3253	Install a 3000A 40 kA 138 kV breaker on the high side of 138/69 kV transformer #5 at the Millbrook Park station. The transformer and associated bus protection will be upgraded accordingly		AEP (100%)
b3255	Upgrade 795 AAC risers at the Sand Hill 138 kV station towards Cricket Switch with 1272 AAC		AEP (100%)
b3256	Upgrade 500 MCM Cu risers at Tidd 138 kV station towards Wheeling Steel; replace with 1272 AAC conductor		AEP (100%)
b3257	Replace two spans of 336.4 26/7 ACSR on the Twin Branch – AM General #2 34.5 kV circuit		AEP (100%)
b3258	Install a 3000A 63 kA 138 kV breaker on the high side of 138/69 kV transformer #2 at Wagenhals station. The transformer and associated bus protection will be upgraded accordingly		AEP (100%)
b3259	At West Millersburg station, replace the 138 kV MOAB on the West Millersburg – Wooster 138 kV line with a 3000A 40 kA breaker		AEP (100%)
b3261	Upgrade circuit breaker “R1” at Tanners Creek 345 kV. Install Transient Recovery Voltage capacitor to increase the rating from 50 kA to 63 kA		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3269	At West New Philadelphia station, add a high side 138 kV breaker on the 138/69 kV Transformer #2 along with a 138 kV breaker on the line towards Newcomerstown		AEP (100%)
b3270	Install 1.7 miles of 795 ACSR 138 kV conductor along the other side of Dragoon Tap 138 kV line, which is currently double circuit tower with one position open. Additionally, install a second 138/34.5 kV transformer at Dragoon, install a high side circuit switcher on the current transformer at the Dragoon Station, and install two (2) 138 kV line breakers on the Dragoon – Jackson 138 kV and Dragoon – Twin Branch 138 kV lines		AEP (100%)
b3270.1	Replace Dragoon 34.5 kV breakers “B”, “C”, and “D” with 40 kA breakers		AEP (100%)
b3271	Install a 138 kV circuit breaker at Fremont station on the line towards Fremont Center and install a 9.6 MVAR 69 kV capacitor bank at Bloom Road station		AEP (100%)
b3272	Install two 138 kV circuit switchers on the high side of 138/34.5 kV Transformers #1 and #2 at Rockhill station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3273.1	Rebuild and convert the existing 17.6 miles East Leipsic – New Liberty 34.5 kV circuit to 138 kV using 795 ACSR		AEP (100%)
b3273.2	Convert the existing 34.5 kV equipment to 138 kV and expand the existing McComb station to the north and east to allow for new equipment to be installed. Install two (2) new 138 kV box bays to allow for line positions and two (2) new 138/12 kV transformers		AEP (100%)
b3273.3	Expand the existing East Leipsic 138 kV station to the north to allow for another 138 kV line exit to be installed. The new line exit will involve installing a new 138 kV circuit breaker, disconnect switches and the addition of a new dead end structure along with the extension of the existing 138 kV bus work		AEP (100%)
b3273.4	Add one (1) 138 kV circuit breaker and disconnect switches in order to add an additional line position at New Liberty 138 kV station. Install line relaying potential devices and retire the 34.5 kV breaker 'F'		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3274	Rebuild approximately 8.9 miles of 69 kV line between Newcomerstown and Salt Fork Switch with 556 ACSR conductor		AEP (100%)
b3275.1	Rebuild the Kammer Station – Cresaps Switch 69 kV line, approximately 0.5 mile		AEP (100%)
b3275.2	Rebuild the Cresaps Switch – McElroy Station 69 kV, approximately 0.67 mile		AEP (100%)
b3275.3	Replace a single span of 4/0 ACSR from Moundsville - Natrium structure 93L to Carbon Tap switch 69 kV located between the Colombia Carbon and Conner Run stations. Remainder of the line is 336 ACSR		AEP (100%)
b3275.4	Rebuild from Colombia Carbon to Columbia Carbon Tap structure 93N 69 kV, approximately 0.72 mile. The remainder of the line between Colombia Carbon Tap structure 93N and Natrium station is 336 ACSR and will remain		AEP (100%)
b3275.5	Replace the Cresaps 69 kV 3-Way Phase-Over-Phase switch and structure with a new 1200A 3-Way switch and steel pole		AEP (100%)
b3275.6	Replace 477 MCM Alum bus and risers at McElroy 69 kV station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3275.7	Replace Natrium 138 kV bus existing between CB-BT1 and along the 138 kV Main Bus #1 dropping to CBH1 from the 500 MCM conductors to a 1272 KCM AAC conductor. Replace the dead end clamp and strain insulators		AEP (100%)
b3276.1	Rebuild the 2/0 Copper section of the Lancaster – South Lancaster 69 kV line, approximately 2.9 miles of the 3.2 miles total length with 556 ACSR conductor. The remaining section has a 336 ACSR conductor		AEP (100%)
b3276.2	Rebuild the 1/0 Copper section of the line between Lancaster Junction and Ralston station 69 kV, approximately 2.3 miles of the 3.1 miles total length		AEP (100%)
b3276.3	Rebuild the 2/0 Copper portion of the line between East Lancaster Tap and Lancaster 69 kV, approximately 0.81 mile		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3278.1	Replace H.S. MOAB switches on the high side of the 138/69/34.5 kV transformer T1 with a H.S. circuit switcher at Saltville station		AEP (100%)
b3278.2	Replace existing 138/69/34.5 kV transformer T2 with a new 130 MVA 138/69/13 kV transformer at Meadowview station		AEP (100%)
b3279	Install a new 138 kV, 21.6 MVAR cap bank and circuit switcher at Apple Grove station		AEP (100%)
b3280	Rebuild the existing Cabin Creek – Kelly Creek 46 kV line (to Structure 366-44), approximately 4.4 miles. This section is double circuit with the existing Cabin Creek – London 46 kV line so a double circuit rebuild would be required		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3281	Install 138 kV circuit switcher on the 138/69 kV Transformer #1 and 138/34.5 kV Transformer #2 at Dewey 138 kV substation. Install 138 kV 2000 A 40 kA breaker on Stanville line at Dewey 138 kV substation		AEP (100%)
b3282.1	Install a second 138 kV circuit utilizing 795 ACSR conductor on the open position of the existing double circuit towers from East Huntington – North Proctorville. Remove the existing 34.5 kV line from East Huntington – North Chesapeake and rebuild this section to 138 kV served from a new PoP switch off the new East Huntington – North Proctorville 138 kV #2 line		AEP (100%)
b3282.2	Install a 138 kV 40 kA circuit breaker at North Proctorville station		AEP (100%)
b3282.3	Install a 138 kV 40 kA circuit breaker at East Huntington station		AEP (100%)
b3282.4	Convert the existing 34/12 kV North Chesapeake to a 138/12 kV station		AEP (100%)
b3283	Replace the existing Inez 138/69 kV 50 MVA autotransformer with a 138/69 kV 90 MVA autotransformer		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3284	Rebuild approximately 5.44 miles of 69 kV line from Lock Lane to Point Pleasant		AEP (100%)
b3285	Replace the Meigs 69 kV 4/0 Cu station riser towards Gavin and rebuild the section of the Meigs – Hemlock 69 kV circuit from Meigs to approximately Structure #40 (about 4 miles) replacing the line conductor 4/0 ACSR with the line conductor size 556.5 ACSR		AEP (100%)
b3286	Reconductor the first 3 spans from Merrimac station to Structure 464-3 of 3/0 ACSR conductor utilizing 336 ACSR on the existing Merrimac – Midway 69 kV circuit		AEP (100%)
b3287	Upgrade 69 kV risers at Moundsville station towards George Washington		AEP (100%)
b3288.1	Construct approximately 2.75 miles Orinoco – Stone 69 kV transmission line in the clear between Orinoco station and Stone station		AEP (100%)
b3288.2	Construct approximately 3.25 miles Orinoco – New Camp 69 kV transmission line in the clear between Orinoco station and New Camp station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3288.3	At Stone substation, circuit breaker A to remain in place and be utilized as T1 low side breaker, circuit breaker B to remain in place and be utilized as new Hatfield (via Orinoco and New Camp) 69 kV line breaker. Add new 69 kV circuit breaker E for Coleman line exit		AEP (100%)
b3288.4	Reconfigure the New Camp 69 kV tap which includes access road improvements/installation, temporary wire and permanent wire work along with dead end structures installation		AEP (100%)
b3288.5	At New Camp substation, rebuild the 69 kV bus, add 69 kV MOAB W and replace the 69 kV ground switch Z1 with a 69 kV circuit switcher on the New Camp transformer		AEP (100%)
b3289.1	Install high-side circuit switcher on 138/69/12 kV T5 at Roanoke station		AEP (100%)
b3289.2	Install high-side circuit switcher on 138/69/34.5 kV T1 at Huntington Court station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3290.1	Build 9.4 miles of single circuit 69 kV line from Roselms to near East Ottoville 69 kV switch		AEP (100%)
b3290.2	Rebuild 7.5 miles of double circuit 69 kV line between East Ottoville switch and Kalida station (combining with the new Roselms to Kalida 69 kV circuit)		AEP (100%)
b3290.3	At Roselms switch, install a new three way 69 kV, 1200 A phase-over-phase switch, with sectionalizing capability		AEP (100%)
b3290.4	At Kalida 69 kV station, terminate the new line from Roselms switch. Move the CS XT2 from high side of T2 to the high side of T1. Remove existing T2 transformer		AEP (100%)
b3291	Replace the Russ St. 34.5 kV switch		AEP (100%)
b3292	Replace existing 69 kV capacitor bank at Stuart station with a 17.2 MVAR capacitor bank		AEP (100%)
b3293	Replace 2/0 Cu entrance span conductor on the South Upper Sandusky 69 kV line and 4/0 Cu Risers/Bus conductors on the Forest line at Upper Sandusky 69 kV station		AEP (100%)
b3294	Replace existing 69 kV disconnect switches for circuit breaker "C" at Walnut Avenue station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3295	Grundy 34.5 kV: Install a 34.5 kV 9.6 MVAR cap bank		AEP (100%)
b3296	Rebuild the overloaded portion of the Concord – Whitaker 34.5 kV line (1.13 miles). Rebuild is double circuit and will utilize 795 ACSR conductor		AEP (100%)
b3297.1	Rebuild 4.23 miles of 69 kV line between Sawmill and Lazelle station, using 795 ACSR 26/7 conductor		AEP (100%)
b3297.2	Rebuild 1.94 miles of 69 kV line between Westerville and Genoa stations, using 795 ACSR 26/7 conductor		AEP (100%)
b3297.3	Replace risers and switchers at Lazelle, Westerville, and Genoa 69 kV stations. Upgrade associated relaying accordingly		AEP (100%)
b3298	Rebuild 0.8 mile of double circuit 69 kV line between South Toronto and West Toronto. Replace 219 ACSR with 556 ACSR		AEP (100%)
b3298.1	Replace the 69 kV breaker D at South Toronto station with 40 kA breaker		AEP (100%)
b3299	Rebuild 0.2 mile of the West End Fostoria - Lumberjack Switch 69 kV line with 556 ACSR (Dove) conductors. Replace jumpers on West End Fostoria line at Lumberjack Switch		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3307	Rebuild Fleming station in the clear; Replace 138/69 kV Fleming Transformer #1 with 138/69 kV 130 MVA transformer with high side 138 kV CB; Install a 5 breaker 69 kV ring bus on the low side of the transformer, replace 69 kV circuit switcher AA, replace 69/12 kV Transformer #3 with 69/12 kV 30 MVA transformer, replace 12 kV CB A and D; Retire existing Fleming substation		AEP (100%)
b3308	Reconductor and rebuild 1 span of T-line on the Fort Steuben – Sunset Blvd 69 kV branch with 556 ACSR		AEP (100%)
b3309	Rebuild 1.75 miles of the Greenlawn – East Tiffin line section of the Carothers – Greenlawn 69 kV circuit containing 133 ACSR conductor with 556 ACSR conductor. Upgrade relaying as required		AEP (100%)
b3310.1	Rebuild 10.5 miles of the Howard – Willard 69 kV line utilizing 556 ACSR conductor		AEP (100%)
b3310.2	Upgrade relaying at Howard 69 kV station		AEP (100%)
b3310.3	Upgrade relaying at Willard 69 kV station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3312	Rebuild approximately 4 miles of existing 69 kV line between West Mount Vernon and Mount Vernon stations. Replace the existing 138/69 kV transformer at West Mount Vernon with a larger 90 MVA unit along with existing 69 kV breaker 'C'		AEP (100%)
b3313	Add 40 kA circuit breakers on the low and high side of the East Lima 138/69 kV transformer		AEP (100%)
b3314.1	Install a new 138/69 kV 130 MVA transformer and associated protection at Elliot station		AEP (100%)
b3314.2	Perform work at Strouds Run station to retire 138/69/13 kV 33.6 MVA Transformer #1 and install a dedicated 138/13 KV distribution transformer		AEP (100%)
b3315	Upgrade relaying on Mark Center – South Hicksville 69 kV line and replace Mark Center cap bank with a 7.7 MVAR unit		AEP (100%)
b3320	Replace the CT at Don Marquis 345 kV station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3333.14	Install approximately 2.6 miles greenfield 69 kV line from greenfield Mount Heron station to the existing Horn Mountain Substation		AEP (100%)
b3336	Rebuild 6 miles Benton Harbor - Riverside 138 kV double circuit extension		AEP (100%)
b3337	Replace the one (1) Hyatt 138 kV breaker "AB1" (101N) with 3000 A, 63 kA interrupting breaker		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3338	Replace the two (2) Kenny 138 kV breakers, "102" (SC-3) and "106" (SC-4), each with a 3000 A, 63 kA interrupting breaker		AEP (100%)
b3339	Replace the one (1) Canal 138 kV breaker "3" with 3000 A, 63 kA breaker		AEP (100%)
b3342	Replace the 2156 ACSR and 2874 ACSR bus and risers with 2-bundled 2156 ACSR at Muskingum River 345 kV station to address loading issues on Muskingum - Waterford 345 kV line		AEP (100%)
b3343	Rebuild approximately 0.3 miles of the overloaded 69 kV line between Albion - Philips Switch and Philips Switch - Brimfield Switch with 556 ACSR conductor		AEP (100%)
b3344.1	Install two (2) 138 kV circuit breakers in the M and N strings in the breaker-and-a half configuration in West Kingsport station 138 kV yard to allow the Clinch River - Moreland Dr. 138 kV to cut in the West Kingsport station		AEP (100%)
b3344.2	Upgrade remote end relaying at Riverport 138 kV station due to the line cut in at West Kingsport station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3345.1	Rebuild approximately 4.2 miles of overloaded sections of the 69 kV line between Salt Fork switch and Leatherwood switch with 556 ACSR		AEP (100%)
b3345.2	Update relay settings at Broom Road station		AEP (100%)
b3346.1	Rebuild approximately 3.5 miles of overloaded 69 kV line between North Delphos – East Delphos – Elida Road switch station. This includes approximately 1.1 miles of double circuit line that makes up a portion of the North Delphos – South Delphos 69 kV line and the North Delphos – East Delphos 69 kV line. Approximately 2.4 miles of single circuit line will also be rebuilt between the double circuit portion to East Delphos station and from East Delphos to Elida Road switch station		AEP (100%)
b3346.2	Replace the line entrance spans at South Delphos station to eliminate the overloaded 4/0 Copper and 4/0 ACSR conductor		AEP (100%)
b3347.1	Rebuild approximately 20 miles of 69 kV line between Bancroft and Milton stations with 556 ACSR conductor		AEP (100%)
b3347.2	Replace the jumpers around Hurrican switch with 556 ACSR		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3347.3	Replace the jumpers around Teays switch with 556 ACSR		AEP (100%)
b3347.4	Update relay settings at Winfield station to coordinate with remote ends on line rebuild		AEP (100%)
b3347.5	Update relay settings at Bancroft station to coordinate with remote ends on line rebuild		AEP (100%)
b3347.6	Update relay settings at Milton station to coordinate with remote ends on line rebuild		AEP (100%)
b3347.7	Update relay settings at Putnam Village station to coordinate with remote ends on line rebuild		AEP (100%)
b3348.1	Construct a 138 kV single bus station (Tin Branch) consisting of a 138 kV box bay with a distribution transformer and 12 kV distribution bay. Two 138 kV lines will feed this station (from Logan and Sprigg stations), and distribution will have one 12 kV feed. Install two 138 kV circuit breakers on the line exits. Install 138 kV circuit switcher for the new transformer		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3348.2	Construct a new 138/46/12 kV Argyle station to replace Dehue 46 kV station. Install a 138 kV ring bus using a breaker-and-a-half configuration, with an autotransformer with a 46 kV feed and a distribution transformer with a 12 kV distribution bay. Two 138 kV lines will feed this station (from Logan and Wyoming stations). There will also be a 46 kV feed from this station to Becco station. Distribution will have two 12 kV feeds. Retire Dehue 46 kV station in its entirety		AEP (100%)
b3348.3	Bring the Logan – Sprigg #2 138 kV circuit in and out of Tin Branch station by constructing approximately 1.75 miles of new overhead double circuit 138 kV line. Double circuit T3 series lattice towers will be used along with 795,000 cm ACSR 26/7 conductor. One shield wire will be conventional 7 #8 ALUMOWELD, and one shield wire will be optical ground wire (OPGW)		AEP (100%)
b3348.4	Logan-Wyoming No. 1 circuit in and out of the proposed Argyle 46 kV station. Double circuit T3 series lattice towers will be used along with 795,000 cm ACSR 26/7 conductor. One shield wire will be conventional 7 #8 ALUMOWELD, and one shield wire will be OPGW		AEP (100%)
b3348.5	Rebuild approximately 10 miles of 46 kV line between Becco and the new Argyle 46 kV substation. Retire approximately 16 miles of 46 kV line between the new Argyle substation and Chauncey station		AEP (100%)
b3348.6	Adjust relay settings due to new line terminations and retirements at Logan, Wyoming, Sprigg, Becco and Chauncey stations		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3349	Replace Bellefonte 69 kV risers on the section between Bellefonte Transformer #3 and 69 kV Bus #2		AEP (100%)
b3350.1	Replace Bellefonte 69 kV breakers C, G, I, Z, AB and JJ in place. The new 69 kV breakers to be rated at 3000 A 40 kA		AEP (100%)
b3350.2	Upgrade remote end relaying at Point Pleasant, Coalton and South Point 69 kV substations		AEP (100%)
b3351	Replace the 69 kV in-line switches at Monterey 69 kV substation		AEP (100%)
b3352	Replace MOAB W, MOAB Y, and line and bus side jumpers of both W and Y MOABs at 47th Street 69 kV station. Upgrade the 69 kV strain bus between MOABs W and Y to 795 KCM AAC. Change the connectors on the tap to MOAB X1 to accommodate the larger 795 KCM AAC		AEP (100%)
b3353.1	Rebuild Allen station to the northwest of its current footprint utilizing a standard air-insulated substation with equipment raised by 7’ concrete platforms and control house raised by a 10’ platform to mitigate flooding concerns. Install five 69 kV 3000A 40 kA circuit breakers in a ring bus (operated at 46 kV) configuration with a 13.2 MVAR capacitor bank. Existing Allen station will be retired (does not include the distribution cost). Distribution scope of work: Install 69/46 kV-12 kV 20 MVA transformer along with 2-12 kV breakers on 7’ concrete platforms (conversion of S2405.1)		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3353.2	A 0.20 mile segment of Allen – East Prestonsburg 46 kV line will be relocated to the new Allen 46 kV station (SN/SE/WN/WE: 53/61/67/73 MVA) (Conversion of S2405.2)		AEP (100%)
b3353.3	The McKinney – Allen new line extension will walk around the south and east sides of the existing Allen station to the new Allen station being built in the clear. A short segment of new single circuit 69 kV line and a short segment of new double circuit 69 kV line (both operated at 46 kV) will be added to the line to tie into the new Allen station bays (Conversion of S2405.3)		AEP (100%)
b3353.4	A segment of Stanville – Allen 46 kV line will be relocated to the new Allen station (SN/SE/WN/WE: 50/50/63/63 MVA) (Conversion of S2405.4)		AEP (100%)
b3353.5	0.25 mile segment of the existing Allen – Prestonsburg 46 kV single circuit will be relocated. The relocated line segment will require construction of one custom self-supporting double circuit dead-end structure and single circuit suspension structure. A short segment of new double circuit 69 kV line (energized at 46 kV) will be added to tie into the new Allen station bays, which will carry Allen – Prestonsburg 46 kV and Allen-East Prestonsburg 46 kV lines. A temporary 0.15 mile section double circuit line will be constructed to keep Allen – Prestonsburg and Allen – East Prestonsburg 46 kV lines energized during construction (Conversion of S2405.5)		AEP (100%)
b3353.6	Remote end work will be required at Prestonsburg, Stanville and McKinney 46 kV stations (Conversion of S2405.6)		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3354	Replace circuit breakers '42' and '43' at Bexley station with 3000 A, 40 kA 69 kV breakers (operated at 40 kV), slab, control cables and jumpers		AEP (100%)
b3355	Replace circuit breakers 'A' and 'B' at South Side Lima station with 1200 A, 25 kA 34.5 kV breakers, slab, control cables and jumpers		AEP (100%)
b3356	Replace circuit breaker 'H' at West End Fostoria station with 3000 A, 40 kA 69 kV breaker, slab, control cables and jumpers		AEP (100%)
b3357	Replace circuit breakers 'C', 'E,' and 'L' at Natrium station with 3000 A, 40 kA 69 kV breakers, slab, control cables and jumpers		AEP (100%)
b3358	Install a 69 kV 11.5 MVAR capacitor at Biers Run 69 kV station		AEP (100%)
b3359	Rebuild approximately 2.3 miles of the existing North Van Wert Sw. – Van Wert 69 kV line utilizing 556 ACSR conductor		AEP (100%)
b3360	Replace Thelma Transformer #1 with a 138/69/46 kV 130/130/90 MVA transformer and replace 46 kV risers and relaying toward Kenwood substation. Existing Transformer #1 to be used as spare		AEP (100%)
b3361	Rebuild Prestonsburg - Thelma 46kV circuit connecting though Kenwood station, approximately 12.7 miles. Retire Jenny Wiley SS and Van Lear SS		AEP (100%)
b3362	Rebuild approximately 3.1 miles of the overloaded conductor on the existing Oertels Corner – North Portsmouth 69 kV line utilizing 556 ACSR		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3722	Rebuild the existing Darrah – Barnett 69 kV line, approximately 2.8 miles and replace a riser at Darrah station		AEP (100%)
b3723	Rebuild the George Washington – Kammer 138 kV circuit, except for 0.1 mile of previously-upgraded T-line outside each terminal station (6.7 miles of total upgrade scope). Remove the existing 6-wired steel lattice towers and supplement the right-of-way as needed		AEP (100%)
b3724	Install 138 kV circuit switcher on the high-side of Transformer #2 at Roanoke station (previously proposed as a portion of s2469.7, posted in 2021 AEP local plan)		AEP (100%)
b3731	Replace 40 kV breaker J at McComb 138 kV station with a new 3000A 40 kA breaker		AEP (100%)
b3732	Install a 6 MVAR, 34.5 kV cap bank at Morgan Run station		AEP (100%)
b3733	Rebuild the 1.8 mile 69 kV line between Summerhill and Willow Grove Switch. Replace 4/0 ACSR conductor with 556 ACSR		AEP (100%)
b3734	Install a 7.7 MVAR, 69 kV cap bank at both Otway station and Rosemount station		AEP (100%)
b3735	Terminate the existing Broadford – Wolf Hills #1 138 kV line into Abingdon 138 kV Station. This line currently bypasses the existing Abingdon 138 kV station; Install two new 138 kV circuit breakers on each new line exit towards Broadford and towards Wolf Hills #1 station; Install one new 138 kV circuit breaker on line exit towards South Abingdon station for standard bus sectionalizing		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3736.1	Establish 69 kV bus and new 69 kV line Circuit Breaker at Dorton substation		AEP (100%)
b3736.2	At Breaks substation, reuse 72 kV breaker A as the new 69 kV line breaker		AEP (100%)
b3736.3	Rebuild approximately 16.7 miles Dorton – Breaks 46 kV line to 69 kV line		AEP (100%)
b3736.4	Retire approximately 17.2 miles Cedar Creek – Elwood 46 kV line		AEP (100%)
b3736.5	Retire approximately 6.2 miles Henry Clay – Elwood 46 kV line section		AEP (100%)
b3736.6	Retire Henry Clay 46 kV substation and replace with Poor Bottom 69 kV station. Install a new 0.7 mile double circuit extension to Poor Bottom 69 kV station		AEP (100%)
b3736.7	Retire Draffin substation and replace with a new substation. Install a new 0.25 mile double circuit extension to New Draffin substation		AEP (100%)
b3736.8	Remote end work at Jenkins substation		AEP (100%)
b3736.9	Provide transition fiber to Dorton, Breaks, Poor Bottom, Jenkins and New Draffin 69 kV substations		AEP (100%)
b3736.10	Henry Clay switch station retirement		AEP (100%)
b3736.11	Cedar Creek substation work		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3736.12	Breaks substation 46 kV equipment retirement		AEP (100%)
b3736.13	Retire Pike 29 switch station and Rob Fork switch station		AEP (100%)
b3736.14	Serve Pike 29 and Rob Fork substation customers from nearby 34 kV distribution sources		AEP (100%)
b3736.15	Poor Bottom 69 kV substation install		AEP (100%)
b3736.16	Henry Clay 46 kV substation retirement		AEP (100%)
b3736.17	New Draffin 69 kV substation install		AEP (100%)
b3736.18	Draffin 46 kV substation retirement		AEP (100%)
b3748	Replace four Clifty Creek 345 kV 3000A switches with 5000 A 345 kV switches		AEP (100%)
b3763	Replace the Jug Street 138 kV breakers M, N, BC, BD, BE, BF, D, H, J, L, BG, BH, BJ, BK with 80 KA breakers		AEP (100%)
b3764	Replace the Hyatt 138 kV breakers AB1 and AD1 with 63 kA breakers		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3766.1	Hayes – New Westville 138 kV line: Build approximately 0.19 miles of 138 kV line to the Indiana/ Ohio State line to connect to AES's line portion of the Hayes – New Westville 138 kV line with the conductor size 795 ACSR26/7 Drake. This sub-ID includes the cost of line construction and Right of Way (ROW)		AEP (100%)
b3766.2	Hayes – Hodgin 138 kV line: Build approximately 0.05 mile of 138 kV line with the conductor size 795 ACSR26/7 Drake. This sub-ID includes the line construction, ROW, and fiber		AEP (100%)
b3766.3	Hayes 138 kV: Build a new 4-138 kV circuit breaker ring bus. This sub-ID includes the cost of new station construction, property purchase, metering, station fiber and the College Corner – Randolph 138 kV line connection		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3775.6	Perform sag study mitigation work on the Dumont – Stillwell 345 kV line (remove a center-pivot irrigation system from under the line, allowing for the normal and emergency ratings of the line to increase)	**Reliability Driver:** AEP (90.58%) / ComEd (9.42%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3775.7	Upgrade the limiting element at Stillwell or Dumont substation to increase the rating of the Stillwell – Dumont 345 kV line to match conductor rating	**Reliability Driver:** AEP (90.58%) / Dayton (9.42%)
		Market Efficiency Driver: AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3775.10	Perform a sag study on the Olive – University Park 345 kV line to increase the operating temperature to 225 F. Remediation work includes two tower replacements on the line.		**Reliability Driver:** AEP (100%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)
b3775.11	Upgrade the limiting element at Stillwell substation to increase the rating of the Stillwell – Dumont 345 kV line to match conductor rating		**Reliability Driver:** AEP (90.58%) / ComEd (9.42%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3784.1	Replace 138 kV breaker 5 at Canal Street station with a new 3000A 63 kA breaker		AEP (100%)
b3785.1	Replace existing 3000 A wave trap at Mountaineer 765 kV, on the Belmont - Mountaineer 765 kV line, with a new 5000 A wave trap		AEP (100%)
b3786.1	Rebuild approximately 4.5 miles of 69 kV line between Abert and Reusens 69 kV substations. Update line settings at Reusens and Skimmer 69 kV substations		AEP (100%)
b3787.1	Install a Capacitor Voltage Transformer (CCVT) on 3 phase stand and remove the single phase existing CCVT on the 69 kV Coalton to Bellefonte line exit. The existing CCVT is mounted to lattice on a single phase CCVT stand, which will be replaced with the 3 phase CCVT stand. The line riser between line disconnect and line take off is being replaced. This remote end work changes the most limiting series element (MLSE) of the line section between Coalton - Princess 69 kV line section		AEP (100%)
b3788.1	Replace AEP owned station takeoff riser and breaker BB risers at OVEC owned Kyger Creek station		AEP (100%)
b3790.0	Replace the overdutied Olive 345 kV circuit breaker "D" with a 5000A 63 kA circuit breaker. Reuse existing cables and a splice box to support the circuit breaker install		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.100	Establish a new 500 kV breaker position for the low-side of the existing 765/500 kV transformer at Cloverdale Station. The new position will be between two new 500 kV circuit breakers located in a new breaker string, electrically converting the 500 kV yard to "double-bus double-breaker" configuration.	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.121	Kammer to 502 Junction 500 kV line: Conduct LIDAR Sag Study to assess SE rating and needed upgrades	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (21.66%) / APS (0.01%) / BGE (7.14%) / DEOK (0.01%) / Dominion (62.25%) / PEPCO (8.93%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3836.1	Rebuild approximately 1.7 miles of line on the Chemical - Washington Street 46 kV circuit		AEP (100%)
b3837.1	Replace existing 34.5 kV, 25 kA circuit breaker B at West Huntington station with new 69 kV, 40 kA circuit breaker		AEP (100%)
b3838.1	Replace breaker A and B at Timken station with 40 kA breakers		AEP (100%)
b3839.1	Replace 69 kV breaker C at Haviland station with a new 3000A 40 kA breaker		AEP (100%)
b3840.1	Replace Structures 382-66 and 382-63 on Darrah - East Huntington 34.5 kV line to bypass 24th Street station. Retire structures 1 through 5 on Twenty Fourth Street 34.5 kV extension. Retire 24th Street Station. Remove conductors from BASF Tap to BASF		AEP (100%)
b3843.1	Rebuild the underground portion of the Ohio University - West Clark 69 kV line, approximately 0.65 miles		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3847.1	Add a 765 kV breaker at Baker station for the reactor on the Broadford 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (70.68%) / EKPC (8.12%)/ PEPCO (21.20%)
b3847.2	Add two 765 kV breakers to the reactors at Broadford station on the Baker and Jacksons Ferry 765 kV lines		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (36.98%) / BGE (9.18%) / Dayton (0.04%) / DEOK (0.10%) / Dominion (40.81%) / EKPC (0.05%) / PEPCO (12.84%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3847.3	Add a 765 kV breaker to the reactor at Jefferson station on the Greentown 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (64.50%) / DEOK (27.02%) / EKPC (6.06%) / OVEC (2.42%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3851.1	Rebuild Allen – R.P. Mone 345 kV line (18.6 miles)		AEP (0.71%) / Dayton (99.28%) / OVEC (0.01%)
b3851.2	Rebuild R.P. Mone – Maddox Creek 345 kV line (9.4 miles)		AEP (78.50%) / Dayton (21.50%)
b3851.3	Replace 345 kV breakers 'B1' and 'B' at Maddox Creek station		AEP (80.97%) / Dayton (19.03%)
b3851.4	Replace two 345 kV breakers 'M' and 'M2' at East Lima station		AEP (80.97%) / Dayton (19.03%)
b3852.1	Connect and energize a second 765/345 kV bank at Vassell 765 kV station		AEP (89.17%) / Dayton (6.19%) / DEOK (4.57%) / OVEC (0.07%)
b3852.2	Replace 765 kV breaker D at Maliszewski station		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (68.04%) / ATSI (9.61%) / Dayton (1.92%) / DL (3.35%) / Dominion (17.06%) / EKPC (0.02%)
b3872.1	Adjust the tertiary tap on the Hartford 138/69/34.5 kV transformer 1 and on Hartford 138/69/12 kV transformer 4 to eliminate the high voltage issues and avoid circulating current		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3873.1	Install 12 MVAR 34.5 kV cap bank at Greenleaf station		AEP (100%)
b3875.1	Reconductor approximately 3.95 miles of ACSR 6/1 Penguin (4/0) on the Firebrick – Jefferson Switch 69 kV line with ACSR 556.6 26/7. Remote end (line setting) would need to be updated at Firebrick and Lick. Replace 600A switches at Jefferson and replace 477 AA 19 substation conductor at Firebrick		AEP (100%)
b3876.1	Install a 69 kV 11.5 MVAR capacitor bank at Richlands station with a circuit switcher		AEP (100%)
b3877.1	Replace station conductor and switches in the 345 kV yard at Beatty that are currently limiting the 345 kV lines to Adkins and Chenoweth		AEP (100%)
b3877.2	Upgrade 345 kV circuit breakers 'A' and 'A1' to 4000A 63 kA breakers at Adkins station along with some station conductor that is currently limiting the 345 kV line to Beatty		AEP (100%)
b3878.1	Upgrade 765 kV circuit breakers 'B' and 'B2' 'to 5000A 50 kA breakers at Marysville station. In addition, the project will upgrade the existing wavetrap towards Sorenson		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3879.1	Replace line conductor, approximately 0.11 mile of 4/0 ACSR 6/1 conductor with 556.5 26/7 between South Toronto and the South Toronto Tap		AEP (100%)
b3879.2	Upgrade the wave trap, CCVTs, switches, and station conductor at South Toronto station currently limiting the line to South Toronto Tap		AEP (100%)
b3880.1	At Beatty Road substation, install a 69 kV 23 MVAR capacitor bank along with the 69 kV Cap bank breaker		AEP (100%)
b3882.1	Replace 138 kV circuit breaker BB with higher fault current capable counterpart		AEP (100%)
b3883.1	69 kV station equipment, including relays, conductor, and switches, will be replaced at Haviland station in order to address identified overloads on the lines to North Van Wert and Cavett		AEP (100%)
b3884.1	Replace the 69 kV circuit breaker D at Van Wert with a 40 kA breaker		AEP (100%)
b3885.1	Replace 69 kV circuit breakers N and M at Schroyer Avenue station with higher fault current capable counterparts		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3886.1	Replace 69 kV circuit breaker 'A' along with disconnect switches at Benwood substation with a 40 kA Circuit Breaker		AEP (100%)
b3887.1	Replace Greentown 138 kV circuit switcher for Transformer No. 5 with a 138 kV 63 kA circuit breaker		AEP (100%)
b3888.1	Preform sag study and complete mitigations on the 138 kV line between East Leipsic and the AE2-072 tap (Lammer) to allow line's conductor to operate to its maximum operating temperature (MOT)		AEP (100%)
b3889.1	Project will replace limiting station equipment at Tiltonsville station to increase the rating on the branch to Windsor		AEP (100%)
b3890.1	Replace station conductor at South Coshocton station currently limiting the branch to Ohio Central		AEP (100%)
b3891.1	Project will perform relay upgrades at Kenny 138 kV to raise the CT & Relay thermal limits that are currently limiting the line to Roberts		AEP (100%)
b3892.1	Replace 69 kV circuit breakers A and S at Mount Vernon station with 40 kA breakers		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3894.1	Replace limiting station conductor at Tidd on the line to Carnegie (FE)		AEP (100%)
b3895.1	Replace existing 138 kV, 40 kA circuit switcher L at Jacksons Ferry Station with new 138 kV, 63 kA circuit breaker		AEP (100%)
b3896.1	Adjust the capacitor bank voltage settings to allow the cap bank to operate as needed under N-1-1 scenarios		AEP (100%)
b3897.1	Replace the 138 kV 40 kA circuit switcher XT8 with a 63 kA circuit breaker		AEP (100%)
b3898.1	Upgrade the CT thermal limit at Buchanan station on the Buchanan - Keen Mountain 138 kV line		AEP (100%)
b3911.1	Rebuild the existing 1.1 mile Canal - Gay 138 kV oil filled pipe-type underground line to address overloads on the existing cable utilizing 5000 MCM XLPE cable		AEP (100%)
b3912.1	Rebuild the existing 2.2-mile Canal-Mound St 138 kV oil filled pipe-type underground line to address overloads on the existing cable utilizing 5000 MCM XLPE cable		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3913.1	Rebuild 138 kV line section between Beatty and White Road stations (approximately 4.5 miles). Update remote end relay settings as needed		AEP (100%)
b3913.2	Rebuild 138 kV line section between White Road and Cyprus stations (approximately 3.34 miles). Update remote end relay settings as needed		AEP (100%)
b3919.1	Reconfigure Maliszewski 765 kV station from 2 breakers to a 6 breaker ring bus. Install a new 765/345 kV transformer. Establish new 345 kV breakeryard with 3 string breaker and a half to include a line exit to Hyatt and a line exit to Corridor. Loop the existing Hyatt – West Millersport 345 kV line into the new established 345 kV yard at the Maliszewski station		AEP (85.10%) / Dayton (9.33%) / DEOK (5.48%) / OVEC (0.09%)
b3919.2	Establish a 0.18 mile double circuit 345 kV line extension to cut the existing Hyatt – West Millersport 345 kV line in and out of Corridor station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3919.3	Install three new 345 kV breakers at Corridor station in order to accommodate the cut in of the Hyatt - West Millersport 345 kV line		AEP (100%)
b3919.4	Reconductor 10.2 miles of Maliszewski – Corridor 345 kV line		AEP (100%)
b3919.5	Reconductor 4.75 miles of the existing Bokes Creek – Marysville 345 kV circuit. Update the associated relay settings		AEP (100%)
b3919.6	Rebuild 4.4 miles of the existing Marysville – Hyatt 345 kV double circuit line where it extends into Marysville station		AEP (100%)
b3919.7	Upgrade 345 kV breakers K and K1 along with associated switches and conductor to 5000A at Hyatt station		AEP (100%)
b3919.8	Upgrade the relaying and associated equipment at West Millersport station to coordinate with the cut in work to Corridor station		AEP (100%)
b3919.9	Upgrade 3000A 345 kV breaker 'L2' along with associated terminal elements to 5000A at Marysville		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3919.10	Rebuild approximately 19.0 miles of Hyatt – Marysville 345 kV line using 4-bundled 795 ACSR conductor Bold construction (This is an EOL rebuild)	AEP (100%)
b3936.1	AEP Zone 2024W1 P5 Solution #1: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgates: 2024-P5-AEP07, 2024-P5-AEP08	AEP (100%)
b3936.2	AEP Zone 2024W1 P5 Solution #2: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgates: 2024-P5-AEP03, 2024-P5-AEP04	AEP (100%)
b3936.3	AEP Zone 2024W1 P5 Solution #3: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgates: 2024-P5-AEP09, 2024-P5-AEP10, 2024-P5-AEP11, 2024-P5-AEP12	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3936.4	AEP Zone 2024W1 P5 Solution #4: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgate: 2024-P5-AEP05	AEP (100%)
b3936.5	AEP Zone 2024W1 P5 Solution #5: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgate: 2024-P5-AEP01	AEP (100%)
b3936.7	AEP Zone 2024W1 P5 Solution #7: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgate: 2024-P5-AEP06	AEP (100%)
b3945.1	Adjust Mullens 138 kV Cap Bank voltage high setting to 1.04. Adjust protection settings as needed at the station	AEP (100%)
b3946.1	Adjust existing Jarrett 138/46 kV transformer tap to 1:1 to boost voltages on the sub-transmission network	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3946.2	Adjust the existing Hartland 46 kV cap bank voltage high setting to 1.04		AEP (100%)
b3947.1	Remove cans on existing Baileysville 46 kV cap bank to reduce it to 7.2 MVAR		AEP (100%)
b3948.1	Replace the existing 9.6 MVAR 69 kV capacitor bank at Johns Creek station with a 17.2 MVAR capacitor bank. Circuit switcher "AA" will also be replaced		AEP (100%)
b3949.1	Change transformer tap settings at Chauncey station to boost the sub-transmission voltage		AEP (100%)
b3949.2	Change the transformer tap settings at Huff Creek station to boost the sub-transmission voltage		AEP (100%)
b3950.1	Adjust existing Tazewell 138/34.5 kV transformer tap to 1:1 to help mitigate voltages on the 34.5 kV bus		AEP (100%)
b3951.1	To solve the voltage violations, a 69 kV circuit switcher and an 11.5 MVAR capacitor bank will be installed on the 69 kV bus at Falcon station. Falcon station will need to be expanded to fit the capacitor bank		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3952.1	Replace 138 kV, 3000A circuit breakers H and H1 with 4000A circuit breakers		AEP (100%)
b3953.1	Replace 138 kV circuit switcher XT3 with a higher fault current capable circuit breaker at New Carlisle		AEP (100%)
b3954.1	At Thomas Road, replace 69 kV circuit switcher XT1 with a 40 kA circuit switcher		AEP (100%)
b3955.1	Build approximately 0.8-mile 138 kV double circuit extension from Roberts - Wilson 138 kV line into the Milepost 138 kV substation		AEP (100%)
b3955.2	Install additional 2-138 kV circuit breakers at Milepost substation to allow for the Robert - Wilson 138 kV line to come into the milepost substation. DICM will need an expansion for additional relaying panels.		AEP (100%)
b3956.1	Upgrade 336.4 ACSR 26/7 station conductor at Galloway 69 kV		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3957.1	At Haviland substation, replace TR No. 4 with 138/69/12 kV 130 MVA bank, along with associated equipment such as the switch (600A), Sub cond 795 AAC 37 Str., and Sub cond 300 MCM CU bus equipment.		AEP (100%)
b3958.1	Perform sag study mitigations on approximately 1.4 miles of line from Str. 8 to Str. 21 to bring conductor to full 142 MVA SE rating		AEP (100%)
b3959.1	The line section overloading is roughly approximately 0.8 miles consisting of 336 ACSR 30/7 Oriole from structure 44 to Lick station. Reconductor limiting line conductor on the Lick-Ironman 69 kV circuit to match the rest of the line.		AEP (100%)
b3960.1	Replace 138 kV, 40 kA circuit breaker DD with higher fault-current-capable counterpart (63 kA). The new circuit breaker will have a larger footprint, which will require the shifting of nearby equipment.		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3961.1	Replace station terminal equipment: South Side Lima 34.5 kV replace 4/0 AAC, 7-Str. Replace 34.5 kV CB-L jumpers and 34.5 kV Sterling line riser		AEP (100%)
b3962.1	Replace 138 kV circuit breakers CB-H014F2 and CB-H014F5 with 63 kA fault-current-capable breakers		AEP (100%)
b3963.1	Replace 138 kV circuit breakers 102, 103 and circuit switcher XT4 with 63 kA fault-current-capable breakers		AEP (100%)
b3964.1	The 138 kV circuit switcher XT3 will be replaced with a 63 kA breaker		AEP (100%)
b3965.1	Replace 138 kV circuit switchers XT1, XT3, XT2 and XT4 with 63 kA fault-current-capable counterpart		AEP (100%)
b3966.1	Replace 138 kV circuit breakers A, AA, D, E, F, XT1 and XT2 with 63 kA fault-current-capable counterpart. Reroute one line entrance in the station to make more room for the larger breakers		AEP (100%)
b3967.1	Replace the existing Cambridge 34.5 kV circuit breaker F with a 40 kA, 3000A unit		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3968.1	Replace North Newark TR#1 with a 90 MVA bank. DICM expansion will be required. Replace motor operators on high-side switch "Z." Install two 138 kV disconnects on existing 138 kV lattice box bay. Install two 69 kV disconnects on existing 69 kV H-frame structure		AEP (100%)
b3969.1	Replace Findlay Center transformer No. 1 with a 138/69/34.5 90 MVA Unit. Replace the TR1 LS disconnect switch		AEP (100%)
b3970.1	Rebuild line: ~2.87 miles Kenton-South Kenton 69 kV		AEP (100%)
b3971.1	At Haviland, reconductor bus No. 1 Sub cond 500 MCM CU 37 Str toward Haviland bus No. 2 and reconductor Haviland bus No. 2 500 KCM CU, 37-Str. and 795 KCM AAC, 37-Str. toward Timber SW 138 kV		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3972.1	Perform a ratings study and clearance mitigation on the ~5.55-mile section of sag derated 556.5 ACSR 26/7 DOVE conductor (East Lima-STR 28) between the East Lima-Haviland 138 kV circuit on the East Lima-West Lima 138 kV line		AEP (100%)
b3974.1	Replace circuit breaker R with a new 69 kV, 40 kA circuit breaker		AEP (100%)
b3975.1	Install a new 138/69 kV transformer at Catawba station with a high-side circuit switcher and a low-side circuit breaker		AEP (100%)
b3975.2	Upgrade one 69 kV breaker at Huntington Court		AEP (100%)
b4000.1	Add one 765 kV breaker at Amos Substation to expand the breaker and a half scheme to accommodate the new Amos – Welton Spring 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.200	Broadford 765 kV Upgrade: Replace Jackson's Ferry CB Q2		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (21.60%) / APS (12.36%) / BGE (8.28%) / Dominion (46.81%) / PEPCO (10.95%)
b4000.201	Smith Mountain 138 kV Upgrade: Replace 795 KCM AAC, 37-Str. 795 KCM AAC, 37-Str. PH A B2S1 B2S2 BS1 BS2		AEP (100%)
b4000.202	Reconductor 34 miles of Smith Mountain - Redeye 138 kV line		AEP (100%)
b4000.203	Reconductor 34 miles of Redeye - Candler's Mountain 138 kV line		AEP (100%)
b4000.204	Reconductor 34 miles of Candler's Mountain - Opossum Creek 138 kV line		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.205	Candler's Mountain 138 kV: Replace 1590 KCM AAC, 61-Str. Replace MOAB "Y" SMITH MTN line		AEP (100%)
b4000.206	Opposum Creek 138 kV: Replace Opossum Creek switch		AEP (100%)
b4000.207	Leesville Station Upgrade 138 kV: Replace 795 KCM AAC, 37-Str. IPS Sch. 40 1272 KCM AAC, 61-Str. 1272 KCM AAC, 61-Str. PH A,B,C ALTA VISTA CB-A BUS DISC ALTA VISTA CB-A LINE DISC Wavetrap (1200A) relay thermal Limit 1356 amps		AEP (100%)
b4000.208	Otter 138 kV Station Upgrade: Replace 795 KCM AAC, 37-Str		AEP (100%)
b4000.209	Reconductor 14.4 miles of Altavista - Otter 138 kV line		AEP (100%)
b4000.210	Reconductor 14.4 miles of Otter - Johnson Mountain 138 kV line		AEP (100%)
b4000.211	Reconductor 14.4 miles of Johnson Mountain - New London 138 kV line		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4000.251	Replace the wave trap and upgrade the relay at Cloverdale 765 kV substation	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (3.00%) / APS (8.96%) / BGE (6.53%) / Dominion (72.75%) / PEPCO (8.76%)
b4000.252	Replace the wave trap and upgrade the relay at Joshua Falls 765 kV substation	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (3.00%) / APS (8.96%) / BGE (6.53%) / Dominion (72.75%) / PEPCO (8.76%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.359	Add (2) 765 kV breakers at Joshua Falls substation. Substation expansion is required to add the additional breakers		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.11%) / BGE (6.49%) / Dominion (75.72%) / PEPCO (8.68%)
b4003.3	Relay Settings at College Corner station needed due to Duke rebuilding their College Corner-Collinsville 138 kV line section		AEC (0.12%) / BGE (1.23%) / DEOK (88.39%) / DL (0.41%) / Dominion (6.64%) / DPL (0.33%) / JCPL (0.04%) / ME (0.25%) / OVEC (0.25%) / PECO (0.49%) / PENELEC (0.04%) / PEPCO (1.39%) / PPL (0.42%)~~DEOK (100%)~~
b4026.1	Rebuild approximately 3.5 miles of 69 kV line from Platter Creek to Sherwood station		AEC (0.42%) / AEP (43.74%) / ATSI (22.83%) / Dayton (9.04%) / DEOK (0.31%) / DL (2.53%) / Dominion (14.56%) / DPL (0.44%) / EKPC (0.93%) / JCPL (1.00%) / NEPTUNE* (0.11%) / OVEC (0.07%) / PECO (1.46%) / PENELEC (0.64%) / PSEG (1.85%) / RE (0.07%)~~AEP (100%)~~
b4026.2	Rebuild approximately 11.1 miles of 69 kV line from Sherwood to Auglaize station		AEC (0.47%) / AEP (37.14%) / ATSI (25.51%) / ComEd (0.01%) / Dayton (10.10%) / DEOK (0.34%) / DL (2.82%) / Dominion (16.27%) / DPL (0.49%) / EKPC (1.04%) / JCPL (1.12%) / NEPTUNE* (0.13%) / OVEC (0.08%) / PECO (1.63%) / PENELEC (0.72%) / PSEG (2.06%) / RE (0.07%)~~AEP (100%)~~

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4027.1	Sag study the Smith Mountain-Moneta 138 kV line. Approximately 14 structures will need to be added in existing rights-of-way to increase the sag along the existing centerline such that the higher requested ampacity can be achieved along the corridor and maintain safety clearances		AEC (0.23%) / AEP (32.88%) / APS (10.40%) / ATSI (6.36%) / BGE (6.66%) / ComEd (0.73%) / Dayton (2.80%) / DEOK (3.33%) / DL (1.49%) / Dominion (13.06%) / DPL (0.22%) / EKPC (0.20%) / JCPL (0.74%) / ME (0.31%) / NEPTUNE* (0.08%) / OVEC (0.11%) / PECO (0.74%) / PENELEC (0.24%) / PEPCO (12.05%) / PPL (5.83%) / PSEG (1.49%) / RE (0.05%)~~AEP (100%)~~
b4027.2	Replace the 2" IPS Sch. 40 conductor with 4" IPS Sch. 40 conductor at Smith Mountain station on the Smith Mountain-Rock Castle branch allowing the branch to exceed a summer emergency rating of 1765 A		AEC (0.24%) / AEP (42.72%) / APS (8.02%) / ATSI (6.75%) / BGE (5.14%) / ComEd (0.77%) / Dayton (2.97%) / DEOK (3.53%) / DL (1.58%) / Dominion (10.07%) / DPL (0.23%) / EKPC (0.21%) / JCPL (0.78%) / ME (0.32%) / NEPTUNE* (0.09%) / OVEC (0.12%) / PECO (0.78%) / PENELEC (0.26%) / PEPCO (9.29%) / PPL (4.49%) / PSEG (1.58%) / RE (0.06%)~~AEP (100%)~~

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4028.1	Rebuild 2.3 miles of the Mound Street - St Clair Avenue 138 kV UG line with 5000 KCM XLPE cable		~~AEP (100%)~~AEC (0.14%) / AEP (85.94%) / ATSI (5.45%) / ComEd (1.83%) / DL (1.08%) / Dominion (1.23%) / DPL (0.07%) / EKPC (0.43%) / JCPL (0.62%) / ME (0.21%) / NEPTUNE* (0.07%) / PECO (0.49%) / PENELEC (0.19%) / PEPCO (0.85%) / PSEG (1.35%) / RE (0.05%)
b4035.1	Reconductor one span of the Smith Mountain - Museville 138 kV line with 2-556 ACSR conductor		AEP (100%)
b4035.2	Replace Smith Mountain 138 kV switches CS1, CS2 and C1S2 with 3000A switches and replace switch jumpers with 2-1272 AAC		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.5	Upgrade Mountaineer terminal of Mountaineer - Belmont 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.07%) / AEP (3.16%) / APS (3.55%) / ATSI (28.79%) / BGE (0.62%) / ComEd (2.21%) / Dayton (0.87%) / DEOK (1.59%) / DL (11.36%) / Dominion (16.32%) / DPL (0.78%) / EKPC (0.34%) / JCPL (4.08%) / ME (2.26%) / NEPTUNE* (0.44%) / OVEC (0.03%) / PECO (3.97%) / PENELEC (1.37%) / PEPCO (9.62%) / PPL (0.47%) / PSEG (6.85%) / RE (0.25%)~~AEP (3.31%) / APS (3.71%) / ATSI (51.69%) / BGE (0.65%) / Dayton (0.91%) / DEOK (1.66%) / DL (20.41%) / EKPC (0.36%) / OVEC (0.03%) / PEPCO (17.27%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4036.6	Upgrade Belmont terminal of Mountaineer - Belmont 765 kV line	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.07%) / AEP (3.16%) / APS (3.55%) / ATSI (28.79%) / BGE (0.62%) / ComEd (2.21%) / Dayton (0.87%) / DEOK (1.59%) / DL (11.36%) / Dominion (16.32%) / DPL (0.78%) / EKPC (0.34%) / JCPL (4.08%) / ME (2.26%) / NEPTUNE* (0.44%) / OVEC (0.03%) / PECO (3.97%) / PENELEC (1.37%) / PEPCO (9.62%) / PPL (0.47%) / PSEG (6.85%) / RE (0.25%)~~AEP (3.31%) / APS (3.71%) / ATSI (51.69%) / BGE (0.65%) / Dayton (0.91%) / DEOK (1.66%) / DL (20.41%) / EKPC (0.36%) / OVEC (0.03%) / PEPCO (17.27%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4036.7	Kammer substation work for new Kammer - Buttermilk Falls 765 kV line termination	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.33%) / AEP (2.07%) / APS (16.49%) / ATSI (13.74%) / BGE (1.06%) / ComEd (0.04%) / Dayton (0.46%) / DEOK (0.60%) / Dominion (17.28%) / DPL (1.94%) / EKPC (0.16%) / JCPL (8.19%) / ME (0.25%) / NEPTUNE* (0.88%) / OVEC (0.01%) / PECO (8.84%) / PENELEC (0.01%) / PEPCO (10.67%) / PPL (1.93%) / PSEG (12.59%) / RE (0.46%)~~AEC (2.99%) / AEP (2.09%) / APS (21.19%) / ATSI (17.66%) / BGE (1.07%) / Dayton (0.47%) / DEOK (0.61%) / EKPC (0.16%) / ME (0.26%) / NEPTUNE* (1.14%) / PECO (11.36%) / PEPCO (13.71%) / PSEG (16.18%) / RE (0.59%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.1	Greentown 765 kV substation scope (AEP): Create a new 765 KV line position with three 100 MVAR single-phase reactors. Install two 765 kV circuit breakers	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.49%) / AEP (57.78%) / ATSI (10.07%) / BGE (1.22%) / Dayton (2.82%) / DEOK (1.49%) / DL (2.73%) / Dominion (17.64%) / DPL (0.83%) / JCPL (0.96%) / NEPTUNE* (0.10%) / PECO (1.84%) / PEPCO (0.83%) / PSEG (1.16%) / RE (0.04%)~~AEP (78.72%) / ATSI (13.72%) / Dayton (3.84%) / DL (3.72%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.2	Greentown - Teddy 765 kV line: Construct 60-mile 765 kV AC overhead transmission line between the existing Greentown 765 kV substation and the proposed Teddy 765 kV substation. (AEP Portion). The total line length is 137 miles of the Greentown to Teddy 765 kV line	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.49%) / AEP (57.78%) / ATSI (10.07%) / BGE (1.22%) / Dayton (2.82%) / DEOK (1.49%) / DL (2.73%) / Dominion (17.64%) / DPL (0.83%) / JCPL (0.96%) / NEPTUNE* (0.10%) / PECO (1.84%) / PEPCO (0.83%) / PSEG (1.16%) / RE (0.04%)~~AEP (78.72%) / ATSI (13.72%) / Dayton (3.84%) / DL (3.72%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.9	Marysville 765 kV substation scope: Create a new 765 kV line position. Install two 765 kV circuit breakers. Create a new 765 kV line position to relocate the existing 765 kV Sorenson line. Install one 765 kV circuit breaker. Add one 765/345 kV, 2250 MVA transformer		AEP (48.19%) / APS (1.76%) / ATSI (18.97%) / Dayton (24.60%) / DEOK (5.45%) / DL (0.50%) / EKPC (0.27%) / PENELEC (0.26%)~~AEP (66.21%) / Dayton (33.79%)~~
b4068.10	Marysville 765 kV substation: Add one 765 kV STATCOM		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.15	Teddy - Cole single-circuit 345 kV: Install second circuit on the vacant side of the existing 9.7-mile 345 kV AC overhead transmission line between the existing Cole 345 kV Substation and the existing Beatty 345 kV substation. The total length of Teddy - Cole 345 kV circuit is 41.7 miles		AEC (0.14%) / AEP (71.90%) / ATSI (6.72%) / BGE (0.53%) / Dayton (7.26%) / DEOK (4.58%) / DL (1.09%) / Dominion (6.15%) / DPL (0.27%) / JCPL (0.21%) / NEPTUNE* (0.02%) / OVEC (0.03%) / PECO (0.56%) / PEPCO (0.43%) / PSEG (0.11%)~~AEP (100%)~~
b4068.16	Cole 345 kV substation scope: Create a new 345 kV line position to interconnect the new 345 kV Teddy line		AEC (0.14%) / AEP (71.90%) / ATSI (6.72%) / BGE (0.53%) / Dayton (7.26%) / DEOK (4.58%) / DL (1.09%) / Dominion (6.15%) / DPL (0.27%) / JCPL (0.21%) / NEPTUNE* (0.02%) / OVEC (0.03%) / PECO (0.56%) / PEPCO (0.43%) / PSEG (0.11%)~~AEP (100%)~~
b4068.17	Beatty 345 kV substation scope: Create a new 345 kV line position to interconnect the new 345 kV Teddy line. Install two 345 kV circuit breakers		AEC (0.07%) / AEP (52.14%) / APS (0.21%) / ATSI (5.33%) / BGE (1.11%) / Dayton (17.06%) / DEOK (15.21%) / DL (0.72%) / Dominion (5.65%) / DPL (0.24%) / JCPL (0.03%) / ME (0.17%) / OVEC (0.16%) / PECO (0.36%) / PENELEC (0.11%) / PEPCO (1.26%) / PPL (0.17%)~~AEP (61.77%) / Dayton (20.21%) / DEOK (18.02%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.18	Guernsey 765 kV substation scope: Create a new 765 kV line position to interconnect the new 765 kV Conesville line. Install one 765 kV circuit breaker	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.03%) / AEP (66.51%) / APS (5.68%) / ATSI (0.18%) / BGE (1.32%) / ComEd (0.60%) / Dayton (8.97%) / DEOK (9.44%) / DL (0.20%) / Dominion (0.84%) / DPL (0.04%) / EKPC (1.30%) / JCPL (0.09%) / ME (0.76%) / NEPTUNE* (0.01%) / OVEC (0.15%) / PECO (0.13%) / PENELEC (0.03%) / PEPCO (2.69%) / PPL (0.89%) / PSEG (0.13%) / RE (0.01%)~~AEP (71.03%) / APS (6.07%) / Dayton (9.59%) / DEOK (10.08%) / DL (1.68%) / EKPC (1.39%) / OVEC (0.16%)~~
b4068.20	West Millersport substation scope: Construct a new 765 kV West Millersport yard. Install four circuit breakers. Install one 765/345 kV, 2250 MVA transformer. Install one 345 kV circuit breaker	AEP (81.91%) / APS (2.41%) / ATSI (2.81%) / Dayton (6.55%) / DEOK (6.22%) / OVEC (0.10%)~~AEP (86.42%) / Dayton (6.91%) / DEOK (6.57%) / OVEC (0.10%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.21	Ohio Central 345 kV scope: Retire a segment of the Bixby to Ohio Central 345 kV line and install approximately 3 miles of greenfield single-circuit 345 kV line from structure 284 to West Millersport substation	AEC (0.03%) / AEP (60.02%) / APS (2.20%) / ATSI (0.44%) / BGE (0.16%) / ComEd (0.03%) / Dayton (15.33%) / DEOK (17.67%) / DL (0.21%) / Dominion (0.84%) / DPL (0.04%) / EKPC (0.04%) / JCPL (0.07%) / ME (0.52%) / NEPTUNE* (0.01%) / OVEC (0.22%) / PECO (0.10%) / PENELEC (0.02%) / PEPCO (0.89%) / PPL (1.05%) / PSEG (0.11%)~~AEP (64.37%) / Dayton (16.44%) / DEOK (18.95%) / OVEC (0.24%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.22	Ohio Center - Conesville 345 kV: Wreck Ohio Center - Conesville 345 kV circuit to facilitate the Conesville - West Millersport 765 kV line		AEC (0.80%) / AEP (23.83%) / APS (4.43%) / ATSI (14.12%) / BGE (1.93%) / ComEd (0.31%) / Dayton (6.01%) / DEOK (7.71%) / DL (5.83%) / Dominion (16.68%) / DPL (0.84%) / EKPC (1.27%) / JCPL (2.51%) / ME (1.62%) / NEPTUNE* (0.27%) / OVEC (0.14%) / PECO (3.00%) / PENELEC (0.16%) / PEPCO (3.25%) / PPL (1.32%) / PSEG (3.83%) / RE (0.14%)~~AEP (31.83%) / Dayton (8.03%) / DEOK (10.30%) / DL (49.65%) / OVEC (0.19%)~~
b4068.23	Ohio Center - Bixby 345 kV: Wreck part of Ohio Center - Bixby 345 kV circuit around West Millersport 345 kV to facilitate the Conesville - West Millersport 765 kV line		AEC (0.80%) / AEP (23.83%) / APS (4.43%) / ATSI (14.12%) / BGE (1.93%) / ComEd (0.31%) / Dayton (6.01%) / DEOK (7.71%) / DL (5.83%) / Dominion (16.68%) / DPL (0.84%) / EKPC (1.27%) / JCPL (2.51%) / ME (1.62%) / NEPTUNE* (0.27%) / OVEC (0.14%) / PECO (3.00%) / PENELEC (0.16%) / PEPCO (3.25%) / PPL (1.32%) / PSEG (3.83%) / RE (0.14%)~~AEP (31.83%) / Dayton (8.03%) / DEOK (10.30%) / DL (49.65%) / OVEC (0.19%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.24	Ohio Central 138 kV scope: Extend existing Ohio Central 345 kV Extension by one span to cut into the existing Conesville - Newark Center 138 kV line to loop the existing Conesville – Newark Center 138 kV Line into Ohio Central Station by installing four new three-pole steel pole structures		AEC (0.02%) / AEP (80.98%) / BGE (1.14%) / ComEd (0.22%) / Dayton (5.54%) / DEOK (3.86%) / Dominion (4.70%) / DPL (0.18%) / EKPC (0.67%) / ME (0.21%) / OVEC (0.05%) / PECO (0.27%) / PEPCO (1.30%) / PPL (0.86%)~~AEP (100%)~~
b4068.25	Bixby 345 kV substation scope: New relaying at Bixby 345 kV substation		AEP (100%)
b4068.27	West Millersport - Kirk 345 kV: Rebuild 6.37-mile section of the double-circuit West Millersport - Kirk 345 kV circuit		AEP (86.23%) / APS (0.54%) / ComEd (0.58%) / Dayton (6.85%) / DEOK (5.29%) / EKPC (0.19%) / ME (0.03%) / OVEC (0.02%) / PENELEC (0.11%) / PPL (0.16%)~~AEP (92.64%) / Dayton (7.36%)~~

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Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b4068.28	Hyatt - Maliszewski 345 and 138 kV rebuild: Rebuild 5.25-mile section of the 345 kV circuit from Hyatt Station to Maliszewski station that shares tower with 138 kV line		AEC (0.35%) / APS (4.91%) / ATSI (23.54%) / BGE (1.04%) / ComEd (0.85%) / Dayton (33.81%) / DEOK (16.63%) / DL (1.73%) / Dominion (12.58%) / DPL (0.64%) / EKPC (0.34%) / JCPL (0.57%) / ME (0.02%) / NEPTUNE* (0.06%) / OVEC (0.07%) / PECO (1.38%) / PENELEC (0.17%) / PEPCO (0.73%) / PPL (0.20%) / PSEG (0.37%) / RE (0.01%)~~Dayton (100%)~~
b4068.29	Hayden - Cole 345 kV: Rebuild 7.89-mile of Beatty - Hayden 345 kV line		AEC (0.23%) / AEP (80.77%) / ATSI (7.38%) / ComEd (0.58%) / DL (1.41%) / Dominion (6.18%) / DPL (0.29%) / EKPC (0.29%) / JCPL (0.64%) / NEPTUNE* (0.07%) / PECO (0.80%) / PENELEC (0.19%) / PSEG (1.13%) / RE (0.04%)~~AEP (100%)~~
b4068.30	Newark 138 kV Center station scope: Replace wave trap and limiting bus conductor at Newark Center substation		AEP (83.28%) / ATSI (0.03%) / BGE (1.43%) / ComEd (0.13%) / Dayton (6.82%) / DEOK (7.50%) / DL (0.01%) / Dominion (0.01%) / DPL (0.02%) / EKPC (0.65%) / OVEC (0.12%)~~AEP (100%)~~
b4068.31	Allen 138 kV substation scope: Replace bus conductor at Allen station		AEP (100%)
b4068.32	Roberts - Kenny 138 kV rebuild: Retire 3.18 miles of the Roberts - Kenny 138 kV underground line and install new underground cable for increased require ratings		AEC (0.17%) / AEP (89.52%) / ATSI (0.92%) / BGE (0.39%) / DL (1.07%) / Dominion (5.88%) / DPL (0.29%) / JCPL (0.36%) / NEPTUNE* (0.04%) / PECO (0.66%) / PEPCO (0.24%) / PSEG (0.44%) / RE (0.02%)~~AEP (100%)~~

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.33	Wilson - Fifth Avenue 138 kV line: Perform sag remediation on the Wilson - Fifth Avenue 138 kV line		AEC (0.17%) / AEP (91.08%) / ATSI (0.12%) / BGE (0.05%) / ComEd (0.18%) / DL (1.07%) / Dominion (5.17%) / DPL (0.23%) / EKPC (0.19%) / JCPL (0.40%) / NEPTUNE* (0.05%) / PECO (0.58%) / PENELEC (0.05%) / PSEG (0.64%) / RE (0.02%)~~AEP (100%)~~
b4068.34	Bethel 138 kV substation scope: Replace one 138 kV circuit breaker		AEP (100%)
b4068.35	OSU 138 kV station scope: Replace one 138 kV circuit breaker		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b4068.36	Hess 138 kV substation scope: Replace one 138 kV circuit breaker to alleviate CT thermal limit		AEC (0.17%) / AEP (91.08%) / ATSI (0.12%) / BGE (0.05%) / ComEd (0.18%) / DL (1.07%) / Dominion (5.17%) / DPL (0.23%) / EKPC (0.19%) / JCPL (0.40%) / NEPTUNE* (0.05%) / PECO (0.58%) / PENELEC (0.05%) / PSEG (0.64%) / RE (0.02%)~~AEP (100%)~~
b4068.37	South Kenton 138 kV substation scope: Replace line-side disconnect switches and bus tie switch on East Lima line at South Kenton substation		AEP (100%)
b4068.38	Meadow Lake 345 kV substation scope: Replace four 345 kV circuit breakers		AEC (0.11%) / AEP (56.47%) / ATSI (6.73%) / BGE (0.26%) / ComEd (31.94%) / DL (0.82%) / DPL (0.05%) / JCPL (0.83%) / NEPTUNE* (0.09%) / PECO (0.27%) / PENELEC (0.15%) / PSEG (2.20%) / RE (0.08%)~~AEP (100%)~~
b4068.39	Conesville 765 kV substation scope: Upgrade the existing Conesville substation to include a 765 kV yard and expand the 345 kV yard. Install six 765 kV circuit breakers. Install one 765/345 kV, 2250 MVA transformer. Install one circuit 345 kV circuit breaker. Replace Wave trap and circuit switcher in 138 kV yard.		AEP (79.27%) / APS (3.40%) / ATSI (4.28%) / ComEd (0.60%) / Dayton (6.89%) / DEOK (5.12%) / EKPC (0.39%) / OVEC (0.05%)~~AEP (92.01%) / Dayton (7.99%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.40	Conesville - West Millersport 765 kV: Construct a new 49.1-miles single-circuit 765 kV AC overhead transmission line between the new Conesville 765 kV substation and the new West Millersport 765 kV substation	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.80%) / AEP (23.83%) / APS (4.43%) / ATSI (14.12%) / BGE (1.93%) / ComEd (0.31%) / Dayton (6.01%) / DEOK (7.71%) / DL (5.83%) / Dominion (16.68%) / DPL (0.84%) / EKPC (1.27%) / JCPL (2.51%) / ME (1.62%) / NEPTUNE* (0.27%) / OVEC (0.14%) / PECO (3.00%) / PENELEC (0.16%) / PEPCO (3.25%) / PPL (1.32%) / PSEG (3.83%) / RE (0.14%)~~AEP (31.83%) / Dayton (8.03%) / DEOK (10.30%) / DL (49.65%) / OVEC (0.19%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.41	Adkins 765 kV substation scope: Construct a 765 KV yard at Adkins substation. Install seven 765 kV circuit breakers. Install three 100 MVAR single-phase reactors on each 765 kV line	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.42	Ohio Central Station Scope: Install two new 138 kV circuit breakers		AEC (0.02%) / AEP (81.19%) / BGE (1.13%) / ComEd (0.19%) / Dayton (5.55%) / DEOK (3.82%) / Dominion (4.46%) / DPL (0.18%) / EKPC (0.67%) / ME (0.23%) / OVEC (0.05%) / PECO (0.32%) / PEPCO (1.32%) / PPL (0.87%)~~AEP (100%)~~
b4068.43	Kammer Dumont structures: Lower the existing Kammer to Dumont 765 kV line between structure 169 and 170 to facilitate crossing the proposed Conesville to Guernsey 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.03%) / AEP (69.93%) / APS (4.40%) / ATSI (0.13%) / BGE (0.10%) / ComEd (1.43%) / Dayton (10.20%) / DEOK (9.16%) / DL (0.15%) / Dominion (0.79%) / DPL (0.04%) / EKPC (1.23%) / JCPL (0.06%) / ME (0.46%) / NEPTUNE* (0.01%) / OVEC (0.10%) / PECO (0.10%) / PENELEC (0.02%) / PEPCO (1.05%) / PPL (0.53%) / PSEG (0.08%)~~AEP (76.08%) / Dayton (11.10%) / DEOK (9.96%) / DL (0.22%) / Dominion (1.18%) / EKPC (1.34%) / OVEC (0.12%)~~

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.44	Ohio Central - Fostoria Central structure: Remove structure 10 and replace with lower structure to lower the line		AEC (0.10%) / AEP (4.49%) / APS (5.18%) / ATSI (57.30%) / BGE (2.90%) / ComEd (3.64%) / Dayton (7.11%) / DEOK (0.28%) / DL (0.61%) / Dominion (10.60%) / DPL (0.57%) / EKPC (0.19%) / JCPL (0.46%) / ME (0.60%) / NEPTUNE* (0.04%) / OVEC (0.05%) / PECO (0.65%) / PENELEC (0.52%) / PEPCO (3.15%) / PPL (0.93%) / PSEG (0.61%) / RE (0.02%)~~AEP (7.26%) / ATSI (92.74%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.45	Gavin - Marysville structures: Raise the existing Gavin to Marysville 765 kV line between structures 358 and 359 to facilitate crossing the proposed Teddy to Beatty 345kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.11%) / AEP (58.53%) / APS (2.20%) / ATSI (4.14%) / BGE (0.78%) / ComEd (4.54%) / Dayton (13.11%) / DEOK (8.38%) / DL (0.33%) / Dominion (4.84%) / DPL (0.24%) / EKPC (0.92%) / JCPL (0.11%) / ME (0.13%) / NEPTUNE* (0.01%) / OVEC (0.05%) / PECO (0.43%) / PENELEC (0.04%) / PEPCO (0.85%) / PPL (0.25%) / PSEG (0.01%)~~AEP (67.19%) / BGE (0.93%) / Dayton (15.05%) / DEOK (9.62%) / DL (0.40%) / Dominion (5.79%) / PEPCO (1.02%)~~
b4068.47	Beatty - Hayden structures: Lower the existing Beatty - Hayden 345kV line between structures 2 and 3 to facilitate crossing the proposed Teddy – Beatty 345 kV line		AEC (0.22%) / AEP (79.69%) / ATSI (6.51%) / ComEd (2.36%) / DL (1.33%) / Dominion (4.46%) / DPL (0.22%) / EKPC (1.51%) / JCPL (0.77%) / ME (0.30%) / NEPTUNE* (0.09%) / PECO (0.75%) / PENELEC (0.23%) / PSEG (1.51%) / RE (0.05%)~~AEP (100%)~~

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.48	Marysville 765 kV substation: Add two 345 KV capacitor banks	AEP (100%)
b4068.49	Hyatt - Maliszewski 345 & 138 kV rebuild: Rebuild 5.25-mile section of the 138 kV circuit from Hyatt Station to Maliszewski Station that shares tower with 345 kV line	AEP (63.20%) / APS (2.56%) / ATSI (6.18%) / Dayton (18.30%) / DEOK (9.67%) / OVEC (0.09%)~~AEP (100%)~~

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(20) Virginia Electric and Power Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1698.7	Replace Loudoun 230 kV breaker '203052' with 63 kA rating		Dominion (100%)
b1696.1	Replace the Idylwood 230 kV '25112' breaker with 50 kA breaker		Dominion (100%)
b1696.2	Replace the Idylwood 230 kV '209712' breaker with 50 kA 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2368	Replace the Brambleton 230 kV breaker '209502' with 63 kA breaker		Dominion (100%)
b2369	Replace the Brambleton 230 kV breaker '213702' with 63 kA breaker		Dominion (100%)
b2370	Replace the Brambleton 230 kV breaker 'H302' with 63 kA 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 (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (83.33%) / PEPCO (16.67%)
b2397	Replace the Beaumeade 230 kV breaker '2079T2116' with 63 kA		Dominion (100%)
b2398	Replace the Beaumeade 230 kV breaker '2079T2130' with 63 kA		Dominion (100%)
b2399	Replace the Beaumeade 230 kV breaker '208192' with 63 kA		Dominion (100%)
b2400	Replace the Beaumeade 230 kV breaker '209592' with 63 kA		Dominion (100%)
b2401	Replace the Beaumeade 230 kV breaker '211692' with 63 kA		Dominion (100%)
b2402	Replace the Beaumeade 230 kV breaker '227T2130' with 63 kA		Dominion (100%)

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

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2403	Replace the Beaumeade 230 kV breaker '274T2130' with 63 kA		Dominion (100%)
b2404	Replace the Beaumeade 230 kV breaker '227T2095' with 63 kA		Dominion (100%)
b2405	Replace the Pleasant view 230 kV breaker '203T274' with 63 kA		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 50 kA		Dominion (100%)
b2443.2	Replace the Ox 230 kV breaker '206342' with 63 kA 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 (99.64%) / PEPCO (0.36%)
b2443.7	Replace 19 63 kA 230 kV breakers with 19 80 kA 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2471	Replace Midlothian 500 kV breaker 563T576 and motor operated switches with 3 breaker 500 kV ring bus. Terminate Lines # 563 Carson – Midlothian, #576 Midlothian –North Anna, Transformer #2 in new ring		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b2504	Rebuild 115 kV Line #32 from Halifax-South Boston (6 miles) for min. of 240 MVA and transfer Welco tap to Line #32. Moving Welco to Line #32 requires disabling auto-sectionalizing scheme		Dominion (100%)
b2505	Install structures in river to remove the 115 kV #65 line (Whitestone-Harmony Village 115 kV) from bridge and improve reliability of the line		Dominion (100%)
b2542	Replace the Loudoun 500 kV 'H2T502' breaker with a 50 kA breaker		Dominion (100%)
b2543	Replace the Loudoun 500 kV 'H2T584' breaker with a 50 kA breaker		Dominion (100%)
b2565	Reconductor wave trap at Carver Substation with a 2000A wave trap		Dominion (100%)
b2566	Reconductor 1.14 miles of existing line between ACCA and Hermitage and upgrade associated terminal equipment		Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2582	Rebuild the Elmont – Cunningham 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: BGE (4.97%) / Dominion (88.16%) / PEPCO (6.87%)
b2583	Install 500 kV breaker at Ox Substation to remove Ox Tx#1 from H1T561 breaker failure outage		Dominion (100%)
b2584	Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line		Dominion (100%)
b2585	Reconductor 7.63 miles of existing line between Cranes and Stafford, upgrade associated line switches at Stafford		PEPCO (100%)
b2620	Wreck and rebuild the Chesapeake – Deep Creek – Bowers Hill – Hodges Ferry 115 kV line; minimum rating 239 MVA normal/emergency, 275 MVA load dump rating		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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%)
b2654.4	Install a 2nd 224 MVA 230/115 kV transformer at Hathaway		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2665	Rebuild the Cunningham – Dooms 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (86.24%) / PEPCO (13.76%)
b2686	Pratts Area Improvement		Dominion (100%)
b2686.1	Build a 230 kV line from Remington Substation to Gordonsville Substation utilizing existing ROW		Dominion (100%)
b2686.2	Install a 3rd 230/115 kV transformer at Gordonsville Substation		Dominion (100%)
b2686.3	Upgrade Line 2088 between Gordonsville Substation and Louisa CT Station		Dominion (100%)
b2686.4	Replace the Remington CT 230 kV breaker "2114T2155" with a 63 kA breaker		Dominion (100%)
b2686.11	Upgrading sections of the Gordonsville – Somerset 115 kV circuit		Dominion (100%)
b2686.12	Upgrading sections of the Somerset – Doubleday 115 kV circuit		Dominion (100%)
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%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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 50 kA 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%)

* Neptune Regional Transmission System, LLC
** East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2744	Rebuild the Carson – Rogers Rd 500 kV circuit		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b2745	Rebuild 21.32 miles of existing line between Chesterfield – Lakeside 230 kV		Dominion (100%)
b2746.1	Rebuild Line #137 Ridge Rd – Kerr Dam 115 kV, 8.0 miles, for 346 MVA summer emergency rating		Dominion (100%)
b2746.2	Rebuild Line #1009 Ridge Rd – Chase City 115 kV, 9.5 miles, for 346 MVA summer emergency rating		Dominion (100%)
b2746.3	Install a second 4.8 MVAR capacitor bank on the 13.8 kV bus of each transformer at Ridge Rd		Dominion (100%)
b2747	Install a Motor Operated Switch and SCADA control between Dominion's Gordonsville 115 kV bus and FirstEnergy's 115 kV line		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2757	Install a +/-125 MVAr Statcom at Colington 230 kV		Dominion (100%)
b2758	Rebuild Line #549 Dooms – Valley 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: Dominion (100%)
b2759	Rebuild Line #550 Mt. Storm – Valley 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: APS (95.57%) / DL (0.44%) / Dominion (3.99%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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 115 kV		Dominion (100%)
b2815	Build a new Pinewood 115 kV switching station at the tap serving North Doswell DP with a 115 kV four breaker ring bus		Dominion (100%)
b2842	Update the nameplate for Mount Storm 500 kV "57272" to be 50 kA breaker		Dominion (100%)
b2843	Replace the Mount Storm 500 kV "G2TY" with 50 kA breaker		Dominion (100%)
b2844	Replace the Mount Storm 500 kV "G2TZ" with 50 kA breaker		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2845	Update the nameplate for Mount Storm 500 kV "G3TSX1" to be 50 kA breaker		Dominion (100%)
b2846	Update the nameplate for Mount Storm 500 kV "SX172" to be 50 kA breaker		Dominion (100%)
b2847	Update the nameplate for Mount Storm 500 kV "Y72" to be 50 kA breaker		Dominion (100%)
b2848	Replace the Mount Storm 500 kV "Z72" with 50 kA 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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 (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **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

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2960.1	Replace fixed series capacitors on 500 kV Line #547 at Lexington		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2960.2	Replace fixed series capacitors on 500 kV Line #548 at Valley		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b2961	Rebuild approximately 3 miles of Line #205 & Line #2003 from Chesterfield to Locks & Poe respectively		Dominion (100%)
b2962	Split Line #227 (Brambleton – Beaumeade 230 kV) and terminate into existing Belmont substation		Dominion (100%)
b2962.1	Replace the Beaumeade 230 kV breaker "274T2081" with 63 kA breaker		Dominion (100%)
b2962.2	Replace the NIVO 230 kV breaker "2116T2130" with 63 kA breaker		Dominion (100%)
b2963	Reconductor the Woodbridge to Occoquan 230 kV line segment of Line #2001 with 1047 MVA conductor and replace line terminal equipment at Possum Point, Woodbridge, and Occoquan		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2978	Install 2-125 MVAR STATCOMs at Rawlings and 1-125 MVAR STATCOM at Clover 500 kV substations		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b2980	Rebuild 115 kV Line #43 between Staunton and Harrisonburg (22.8 miles) to current standards with a summer emergency rating of 261 MVA at 115 kV		Dominion (100%)
b2981	Rebuild 115 kV Line #29 segment between Fredericksburg and Aquia Harbor to current 230 kV standards (operating at 115 kV) utilizing steel H-frame structures with 2-636 ACSR to provide a normal continuous summer rating of 524 MVA at 115 kV (1047 MVA at 230 kV)		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3019	Rebuild 500 kV Line #552 Bristers to Chancellor – 21.6 miles long		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: Dominion (100%)
b3019.1	Update the nameplate for Morrisville 500 kV breaker "H1T594" to be 50 kA		Dominion (100%)
b3019.2	Update the nameplate for Morrisville 500 kV breaker "H1T545" to be 50 kA		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3020	Rebuild 500 kV Line #574 Ladysmith to Elmont – 26.2 miles long		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: BGE (6.92%) / Dominion (84.48%) / PEPCO (8.60%)
b3021	Rebuild 500 kV Line #581 Ladysmith to Chancellor – 15.2 miles long		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			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 (99.96%) / PEPCO (0.04%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission 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 50 kA breaker		Dominion (100%)
b3027.4	Update the nameplate for Ladysmith 500 kV breaker "H1T575" to be 50 kA breaker		Dominion (100%)
b3027.5	Update the nameplate for Ladysmith 500 kV breaker "568T574" (will be renumbered as "H2T568") to be 50 kA 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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 Transmission Enhancements		Annual 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%)
b3110.3	Replace the Clifton 230 kV breakers "201182" and "XT2011" with 63 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 Transmission Enhancements		Annual 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%)
b3213.1	Replace the eight (8) Chickahominy 230 kV breakers with 63 kA breakers: “SC122”, “205022”, “209122”, 210222-2”, “28722”, “H222”, “21922” and “287T2129”		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3223.1	Install a second 230 kV circuit with a minimum summer emergency rating of 1047 MVA between Lanexa and Northern Next substations. The second circuit will utilize the vacant arms on the double-circuit structures that are being installed on Line #224 (Lanexa – Northern Next) as part of the End-of-Life rebuild project (b3089)		Dominion (100%)
b3223.2	Expand the Northern Neck terminal from a 230 kV, 4-breaker ring bus to a 6-breaker ring bus		Dominion (100%)
b3223.3	Expand the Lanexa terminal from a 6-breaker ring bus to a breaker-and-a-half arrangement		Dominion (100%)
b3246.1	Convert 115 kV Line #172 Liberty – Lomar and 115 kV Line #197 Cannon Branch – Lomar to 230 kV to provide a new 230 kV source between Cannon Branch and Liberty. The majority of 115 kV Line #172 Liberty – Lomar and Line #197 Cannon Branch – Lomar is adequate for 230 kV operation. Rebuild 0.36 mile segment between the Lomar and Cannon Branch junction. Lines will have a summer rating of 1047MVA/1047MVA (SN/SE)		Dominion (100%)
b3246.2	Perform substation work for the 115 kV to 230 kV line conversion at Liberty, Wellington, Godwin, Pioneer, Sandlot and Cannon Branch		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3246.3	Extend 230 kV Line #2011 Cannon Branch – Clifton to Winters Branch by removing the existing Line #2011 termination at Cannon Branch and extending the line to Brickyard creating 230 kV Line #2011 Brickyard - Clifton. Extend a new 230 kV line between Brickyard and Winters Branch with a summer rating of 1572MVA/1572MVA (SN/SE)		Dominion (100%)
b3246.4	Perform substation work at Cannon Branch, Brickyard and Winters Branch for the 230 kV Line #2011 Cannon Branch – Clifton extension		Dominion (100%)
b3246.5	Replace the Gainesville 230 kV 40 kA breaker "216192" with a 50 kA breaker		Dominion (100%)
b3247	Replace 13 towers with galvanized steel towers on Doubs – Goose Creek 500 kV. Reconductor 3 mile section with three (3) 1351.5 ACSR 45/7. Upgrade line terminal equipment at Goose Creek substation to support the 500 kV line rebuild		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3262	Install a second 115 kV 33.67 MVAR cap bank at Harrisonburg substation along with a 115 kV breaker		Dominion (100%)
b3263	Cut existing 115 kV Line #5 between Bremo and Cunningham substations and loop in and out of Fork Union substation		Dominion (100%)
b3264	Install 40 kA breaker at Stuarts Draft 115 kV station and sectionalize the Doom to Dupont-Waynesboro 115 kV Line #117 into two 115 kV lines		Dominion (100%)
b3268	Build a switching station at the junction of 115 kV line #39 and 115 kV line #91 with a 115 kV capacitor bank. The switching station will be built with 230 kV structures but will operate at 115 kV		Dominion (100%)
b3300	Reconductor 230 kV Line #2172 from Brambleton to Evergreen Mills along with upgrading the line leads at Brambleton to achieve a summer emergency rating of 1574 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3301	Reconductor 230 kV Line #2210 from Brambleton to Evergreen Mills along with upgrading the line leads at Brambleton to achieve a summer emergency rating of 1574 MVA		Dominion (100%)
b3302	Reconductor 230 kV Line #2213 from Cabin Run to Yardley Ridge along with upgrading the line leads at Yardley to achieve a summer emergency rating of 1574 MVA		Dominion (100%)
b3303.1	Extend a new single circuit 230 kV Line #9250 from Farmwell substation to Nimbus substation		Dominion (100%)
b3303.2	Remove Beaumeade 230 kV Line #2152 line switch		Dominion (100%)
b3304	Midlothian area improvements for 300 MW load drop relief		Dominion (100%)
b3304.1	Cut 230 kV Line #2066 at Trabue junction		Dominion (100%)
b3304.2	Reconductor idle 230 kV Line #242 (radial from Midlothian to Trabue junction) to allow a minimum summer rating of 1047 MVA and connect to the section of 230 kV Line #2066 between Trabue junction and Winterpock, re-number 230 kV Line #242 structures to Line #2066		Dominion (100%)
b3304.3	Use the section of idle 115 kV Line #153, between Midlothian and Trabue junction to connect to the section of (former) 230 kV Line #2066 between Trabue junction and Trabue to create new Midlothian – Trabue lines with new line numbers #2218 and #2219		Dominion (100%)
b3304.4	Create new line terminations at Midlothian for the new Midlothian – Trabue 230 kV lines		Dominion (100%)
b3321	Rebuild Cranes Corner - Stafford 230 kV line		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3684	Rebuild 12.4 miles of 115 kV line from Earleys to Kelford with a summer emergency rating of 262 MVA. Replace structures as needed to support the new conductor. Upgrade breaker switch 13668 at Earleys from 1200 A to 2000 A		Dominion (100%)
b3685	Install a 33 MVAR cap bank at Cloud 115 kV bus along with a 115 kV breaker. Add 115 kV circuit breaker for 115 kV Line #38		Dominion (100%)
b3686	Purchase land close to the bifurcation point of 115 kV Line #4 (where the line is split into two sections) and build a new 115 kV switching station called Duncan Store. The new switching station will require space for an ultimate transmission interconnection consisting of a 115 kV six-breaker ring bus (with three breakers installed initially)		Dominion (100%)
b3687	Rebuild approximately 15.1 miles line segment between Bristers and Minnieville D.P. with 2-768 ACSS and 4000 A supporting equipment from Bristers to Ox to allow for future 230 kV capability of 115 kV Line #183. The continuous summer normal rating will be 523 MVA for line Ox – Minnieville. The continuous summer normal rating will be 786 MVA for Minnieville – Bristers line		Dominion (100%)
b3689.1	Reconductor approximately 24.42 miles of 230 kV Line #2114 Remington CT– Elk Run – Gainesville to achieve a summer rating of 1574 MVA by fully reconductoring the line and upgrading the wave trap and substation conductor at Remington CT and Gainesville 230 kV stations		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3689.2	Replace 230 kV breakers SC102, H302, H402 and 218302 at Brambleton substation with 4000A 80 kA breakers and associated equipment including breaker leads as necessary to address breaker duty issues identified in short circuit analysis		Dominion (100%)
b3690	Reconductor approximately 1.07 miles of 230 kV Line #2008 segment from Cub Run to Walney to achieve a summer rating of 1574 MVA. Replace line switch 200826 with a 4000A switch		Dominion (100%)
b3691	Reconductor approximately 1.4 miles of 230 kV Line #2141 from Lakeview to Carolina to achieve a summer rating of 1047 MVA		Dominion (100%)
b3692	Rebuild approximately 27.7 miles of 500 kV transmission line from Elmont to Chickahominy with current 500 kV standards construction practices to achieve a summer rating of 4330 MVA. Latest TEAC changes structures from lattice structures to H-frame		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3692.2	Switch to 5/2 H-frame structures and install approximately 27.7 miles of 230 kV transmission line (but not be terminated) from Elmont to Chickahominy. String up approximately 8 miles of new 230 kV conductor on the open arms of the structures of 230 kV Line No. 2075 that runs parallel to 500 kV Line No. 557		Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3693	Expand substation and install approximately 294 MVAR cap bank at 500 kV Lexington substation along with a 500 kV breaker. Adjust the tap positions associated with the two 230/69 kV transformers at Harrisonburg to neutral position and lock them		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3694.1	Convert 115 kV Line #29 Aquia Harbour to Possum Point to 230 kV (Extended Line #2104) and swap Line #2104 and converted Line #29 at Aquia Harbour backbone termination. Upgrade terminal equipment at Possum Point to terminate converted Line #29 (now extended line #2104). (Line #29 from Fredericksburg to Aquia Harbour is being rebuilt under baseline b2981 to 230 kV standards)		Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3694.2	Upgrade Aquia Harbour terminal equipment to not limit 230 kV Line #9281 conductor rating		Dominion (100%)
b3694.3	Upgrade Fredericksburg terminal equipment by rearranging 230 kV bus configuration to terminate converted Line #29 (now becoming 9281). The project will add a new breaker at the 230 kV bay and reconfigure line termination of 230 kV Line #2157, #2090 and #2083		Dominion (100%)
b3694.4	Reconductor/rebuild approximately 7.6 miles of 230 kV Line #2104 Cranes Corner – Stafford to achieve a summer rating of 1047 MVA. Reconductor/rebuild approximately 0.34 miles of 230 kV Line #2104 Stafford – Aquia Harbour to achieve a summer rating of 1047 MVA. Upgrade terminal equipment at Cranes Corner to not limit the new conductor rating		Dominion (100%)
b3694.5	Upgrade wave trap and line leads at 230 kV Line #2090 Ladysmith CT terminal to achieve 4000A rating		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3694.6	Upgrade Fuller Road substation to feed Quantico substation via 115 kV radial line. Install four-breaker ring bus and break 230 kV Line #252 into two new lines: 1) Line #252 between Aquia Harbour and Fuller Road and 2) Line #9282 between Fuller Road and Possum Point. Install a 230/115 kV transformer which will serve Quantico substation		Dominion (100%)
b3694.7	Energize in-service spare 500/230 kV Carson Transformer #1		Dominion (100%)
b3694.8	Partial wreck and rebuild 10.34 miles of 230 kV Line #249 Carson – Locks to achieve a minimum summer emergency rating of 1047 MVA. Upgrade terminal equipment at Carson and Locks stations to not limit the new conductor rating		Dominion (100%)
b3694.9	Wreck and rebuild 5.4 miles of 115 kV Line #100 Locks – Harrowgate to achieve a minimum summer emergency rating of 393 MVA. Upgrade terminal equipment at Locks and Harrowgate stations to not limit the new conductor rating and perform Line #100 Chesterfield terminal relay work		Dominion (100%)
b3694.10	Reconductor approximately 2.9 miles of 230 kV Line #211 Chesterfield – Hopewell to achieve a minimum summer emergency rating of 1046 MVA		Dominion (100%)
b3694.11	Reconductor approximately 2.9 miles of 230 kV Line #228 Chesterfield – Hopewell to achieve a minimum summer emergency rating of 1046 MVA		Dominion (100%)
b3694.12	Upgrade equipment at Chesterfield 230 kV substation to not limit ratings on Line #211 and #228		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3694.13	Upgrade equipment at Hopewell 230 kV substation to not limit ratings on Line #211 and #228		Dominion (100%)
b3702	Install one 13.5 Ohm series reactor to control the power flow on the 230 kV Line #2054 from Charlottesville substation to Proffit Rd. 230 kV line		AEC (1.59%) / APS (8.85%) / ATSI (5.54%) / BGE (10.79%) / ComEd (1.86%) / Dayton (0.21%) / DEOK (1.16%) / Dominion (18.99%) / DPL (3.68%) / DL (1.16%) / ECP** (0.27%) / HTP*** (0.22%) / JCPL (4.53%) / ME (1.73%) / NEPTUNE* (0.68%) / PECO (6.95%) / PENELEC (4.75%) / PEPCO (9.69%) / PPL (9.78%) / PSEG (7.28%) / RE (0.29%)
b3707.1	Reconductor approximately 0.57 mile of 115 kV Line #1021 from Harmony Village to Greys Point with 768 ACSS to achieve a summer emergency rating of 237 MVA. The current conductor is 477 ACSR		Dominion (100%)
b3707.2	Reconductor approximately 0.97 mile of 115 kV Line #65 from Rappahannock to White Stone with 768 ACSS to achieve a summer emergency rating of 237 MVA. The current conductor is 477 ACSR		Dominion (100%)

*Neptune Regional Transmission System, LLC
**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3718.1	Install one 500/230 kV 1440 MVA transformer at a new substation called Wishing Star. Cut and extend 500 kV Line #546 (Brambleton - Mosby) and 500 kV Line #590 (Brambleton - Mosby) to the proposed Wishing Star substation. Lines to terminate in a 500 kV breaker and a half configuration		Dominion (100%)
b3718.2	Install one 500/230 kV 1440 MVA transformer at a new substation called Mars near Dulles International Airport		Dominion (100%)
b3718.3	Construct a new 500 kV transmission line for approximately 3.5 miles along with substation upgrades at Wishing Star and Mars. New right-of-way will be needed and will share same structures with the line. New conductor to have a minimum summer normal rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.04%) / Dominion (90.96%)
b3718.4	Reconductor approximately 0.62 mile of 230 kV Line #2214 (Buttermilk - Roundtable) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.5	Reconductor approximately 1.52 miles of 230 kV Line #2031 (Enterprise – Greenway - Roundtable) to achieve a summer rating of 1574 MVA		Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3718.6	Reconductor approximately 0.64 mile of 230 kV Line #2186 (Enterprise - Shellhorn) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.7	Reconductor approximately 2.17 miles of 230 kV Line #2188 (Lockridge – Greenway - Shellhorn) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.8	Reconductor approximately 0.84 mile of 230 kV Line #2223 (Lockridge - Roundtable) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.9	Reconductor approximately 3.98 miles of 230 kV Line #2218 (Sojourner – Runway - Shellhorn) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.10	Reconductor approximately 1.61 miles of 230 kV Line #9349 (Sojourner - Mars) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.11	Upgrade 4 - 500 kV breakers (total) to 63 kA on either end of 500 kV Line #502 (Loudoun - Mosby)		Dominion (100%)
b3718.12	Upgrade 4 - 500 kV breakers (total) to 63 kA on either end of 500 kV Line #584 (Loudoun - Mosby)		Dominion (100%)
b3718.13	Cut and loop 230 kV Line #2079 (Sterling Park - Dranesville) into Davis Drive substation and install two GIS 230 kV breakers		Dominion (100%)
b3718.14	Construct a new 230 kV transmission line for approximately 3.5 miles along with substation upgrades at Wishing Star and Mars. New right-of-way will be needed and will share same structures with the 500 kV line. New conductor to have a minimum summer normal rating of 1573 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3759	Reconductor approximately 10.5 miles of 115 kV Line #23 segment from Oak Ridge to AC2-079 Tap to minimum emergency ratings of 393 MVA Summer / 412 MVA Winter		Dominion (100%)
b3779	Cut existing 230 kV line #2183 and extend from Poland Road substation to Evergreen Mills substation. Approximately 0.59 miles of new line will be built from the cut-in to the Evergreen Mills substation. Cut and extend the existing 230 kV line #2183 creating a new line #2210 from Brambleton substation to be terminated at Evergreen Mills substation. Approximately 0.59 miles of new line will be built from the cut-in to the Evergreen Mills substation		Dominion (100%)
b3800.118	Line work for terminating Doubs to Bismark line into Woodside 500 kV substation (DOM Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (21.09%) / BGE (6.55%) / Dominion (64.94%) / PEPCO (7.42%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.120	Aspen substation work to terminate the new NextEra 500 kV line. Include Aspen 500 kV substation portion build		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.18%) / BGE (7.21%) / Dominion (72.52%) / PEPCO (11.09%)
b3800.200	Build a new 500 kV line from Aspen - Golden on 500/230 kV double circuit structures with substation upgrades at Aspen and Golden. New conductor to have a minimum summer normal rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.201	Install two 500/230 kV transformer at Golden substation		Dominion (100%)
b3800.202	Install one 500/230 kV transformer at Aspen substation		Dominion (86.28%) / PEPCO (13.72%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.203	Install a second 500/230 kV 1440 MVA transformer at Mars substation		Dominion (100%)
b3800.204	Reconductor 0.5 mile section of 230 kV line No. 2150 Golden - Paragon Park Circuit 1 to achieve a summer rating of 1573 MVA		Dominion (100%)
b3800.205	Reconductor 0.5 mile section of 230 kV line No. 2081 Golden - Paragon Park Circuit 2 to achieve a summer rating of 1573 MVA		Dominion (100%)
b3800.206	Upgrade Paragon Park substation line conductors to 4000A continuous current rating for 230 kV lines No. 2081 and No. 2150		Dominion (100%)
b3800.207	Reconductor 230 kV line No. 2207 Paragon Park – BECO to achieve a summer rating of 1573 MVA		Dominion (100%)
b3800.208	Upgrade Paragon Park substation conductor and line leads to 4000A continuous current rating for 230 kV line No. 2207		Dominion (100%)
b3800.209	Upgrade BECO substation equipment to 4000A continuous current rating for 230 kV line No.2207		Dominion (100%)
b3800.210	Build a new 230 kV line from Mars - Lockridge on 500/230 kV double circuit structures to achieve a summer rating of 1573 MVA. Install 230 kV equipment at Mars and Lockridge. Remove 230 kV line No. 2095 Mars-Shellhorn and 230 kV line No. 2292 Mars-Sojourner in the existing transmission corridor between Sojourner and Mars substations so that they can be rerouted to the south side of Mars substation, adding approximately 2 miles of new conductor. This is to allow for termination of the line No.2413 and 5003 Golden-Mars 230 and 500 kV circuits into Mars substation. Cut 230 kV line No. 2095 Mars-Shellhorn into Sojourner substation, creating 230 kV line No. 2427 (Mars-Sojourner) and 230 kV line No. 2095 (Sojourner-Shellhorn). Upgrade 4 230 kV breakers at Sojourner substation from 63 kA to 80 kA		Dominion (100%)
b3800.211	Build a new 230 kV line from Lockridge - Golden on 500/230 kV double circuit structures to achieve a summer rating of 1573 MVA. Install 230 kV equipment at Golden and Lockridge substations		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.212	Build a new 500 kV line from Mars - Golden on 500/230 kV double circuit structures with substation upgrades at Golden and Mars. New conductor to have a minimum summer normal rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (99.96%) / Dominion (0.04%)
b3800.213	Cut 500 kV line No. 558 Brambleton - Goose Creek into Aspen substation. Upgrade 500 kV terminal equipment at Aspen and Goose Creek to 5000A continuous rating current. At Goose Creek, replace circuit breakers 59582 and 55882, and associated disconnect switches, breaker leads, bus, and line risers to accommodate 5000A rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (99.39%) / Dominion (0.61%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.214	Build a new 500 kV line from Aspen - Goose Creek to achieve a summer rating of 4357 MVA. Install new 500 kV terminal equipment at Aspen		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (99.39%) / Dominion (0.61%)
b3800.215	Cut 230 kV line No. 2150 Sterling Park - Paragon Park Circuit 1 into Golden substation and install 230 kV equipment at Golden. Upgrade relay settings at Golden substation for upgrading 230 kV line No. 2150 to 4000A continuous current rating		Dominion (100%)
b3800.216	Cut 230 kV line No. 2081 Sterling Park - Paragon Park Circuit 2 into Golden substation and install 230 kV equipment at Golden. Upgrade relay settings at Golden substation for upgrading 230 kV line No. 2081 to 4000A continuous current rating		Dominion (100%)
b3800.217	Build a new 230 kV line from Aspen - Sycolin Creek on 500/230 kV double circuit structures to achieve a summer rating of 1573 MVA. Install 230 kV equipment at Golden and Sycolin Creek substations		Dominion (86.28%) / PEPCO (13.72%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.218	Build a new 230 kV line from Sycolin Creek - Golden on 500/230 kV double circuit structures to achieve a summer rating of 1573 MVA. Install 230 kV equipment at Golden and Sycolin Creek substations		Dominion (100%)
b3800.219	Replace seven overdutied 230 kV breakers at Beaumeade substation with 80 kA breakers		Dominion (100%)
b3800.220	Replace four overdutied 230 kV breakers at BECO substation with 80 kA breakers		Dominion (100%)
b3800.221	Replace four overdutied 230 kV breakers at Belmont substation with 80 kA breakers		Dominion (100%)
b3800.222	Replace one overdutied 230 kV breaker at Discovery substation with 80 kA breaker		Dominion (100%)
b3800.223	Replace one overdutied 230 kV breaker at Pleasant View substation with 80 kA breaker		Dominion (100%)
b3800.224	Replace two overdutied 230 kV breakers at Shellhorn substation with 80 kA breakers		Dominion (100%)
b3800.225	Change 500 kV line No. 558 destination at Brambleton to Aspen substation and upgrade line protection relays		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (5.20%) / DL (0.46%) / Dominion (91.40%) / ME (0.59%) / PEPCO (2.35%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.226	Change 230 kV lines No. 2081 and No. 2150 at Paragon Park substation destination to Golden substation and upgrade line protection relays		Dominion (100%)
b3800.227	Change 230 kV lines No. 2081 and No. 2150 at Sterling Park substation destination to Golden substation and upgrade line protection relays		Dominion (100%)
b3800.228	Reconductor 1.47 miles of 230 kV lines No. 2081 and No. 2150 from Sterling Park to Golden substation. Upgrade terminal equipment at Sterling Park to 4000A continuous current		Dominion (100%)
b3800.229	Reconductor 0.67 miles of 230 kV lines No. 2194 and No. 9231 from Davis Drive to Sterling Park substation. Terminal equipment at remote end substations will be installed or upgraded to 4000A continuous current rating to support new conductor ratings		Dominion (100%)
b3800.230	Reset relays at Breezy Knoll for the revised current rating of 230 kV line No. 2098 Pleasant View - Hamilton		Dominion (100%)
b3800.231	Reset relays at Dry Mill for the revised current rating of 230 kV line No. 2098 Pleasant View - Hamilton		Dominion (100%)
b3800.232	Reset relays at Hamilton for the revised current rating of 230 kV line No. 2098 Pleasant View - Hamilton		Dominion (100%)
b3800.233	Upgrade equipment to 4000A continuous current rating at Pleasant View substation in support of 230 kV line No. 2098 wreck and rebuild. Replace circuit breakers 274T2098 & 2098T2180 and associated disconnect switches, breaker leads, bus, and line risers to accommodate 4000A rating		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.234	Wreck and rebuild approximately one mile of 230 kV line No. 2098 between Pleasant View and structure 2098/9, where line No. 2098 turns towards Hamilton substation		Dominion (100%)
b3800.235	Replace five overdutied 230 kV breakers at Loudoun substation with 80 kA breakers		Dominion (100%)
b3800.236	Replace two overdutied 230 kV breakers at Ox substation with 63 kA breakers		Dominion (100%)
b3800.237	Replace two overdutied 230 kV breakers at Pleasant View substation with 63 kA breakers		Dominion (100%)
b3800.238	Upgrade equipment to 4000A continuous current rating at Pleasant View substation in support of 230 kV line No. 203 rebuild. Replace circuit breakers 203T274 & L3T203 and associated disconnect switches, breaker leads, bus, and line risers to accommodate 4000A rating		APS (8.09%) / BGE (8.25%) / Dominion (64.87%) / PEPCO (18.79%)
b3800.239	Wreck and rebuild 230 kV line No. 203 between Pleasant View and structure 203/15 using double circuit 500/230 kV structures. The 500 kV line is from Aspen - Doubs		APS (8.09%) / BGE (8.25%) / Dominion (64.87%) / PEPCO (18.79%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.240	Build a new 500 kV line from Aspen - Doubs using double circuit 500/230 kV structures. The 230 kV line is from Pleasant View - structure 203/15. Install terminal equipment at Aspen for a 5000A line to Doubs. This includes GIS breakers, GIS-to-AIS transition equipment, and metering CCVTs and CTs for the tie line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.09%) / Dominion (99.89%) / PEPCO (0.02%)
b3800.241	Rebuild 500 kV line No. 514 from Goose Creek - Doubs using 500/230 kV double circuit structures. The new double circuit towers will accommodate 230 kV line No. 2098 between Pleasant View substation and structure 2098/9. Upgrade equipment at Goose Creek to 5000A continuous current rating in support of line No. 514 wreck and rebuild. Replace circuit breakers 514T595 & 51482 and associated disconnect switches, breaker leads, bus, and line risers to accommodate 5000A rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.08%) / Dominion (99.90%) / PEPCO (0.02%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.242	Upgrading switches 20366M and 20369M and line leads to 4000A continuous current rating of 230 kV line No. 203 at Edwards Ferry substation		APS (11.45%) / BGE (14.14%) / Dominion (42.82%) / PEPCO (31.59%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.300	Wreck/Rebuild 230 kV line No. 2135 Hollymeade Junction – Cash's Corner using double-circuit capable 230 kV poles. (The second 230 kV circuit will be wired but not have terminal ends.)		Dominion (100%)
b3800.301	Wreck/Rebuild 230 kV line No. 2135 Cash's Corner - Gordonsville using double-circuit capable 230 kV poles. (The second 230 kV circuit will be wired but not have terminal ends.)		Dominion (100%)
b3800.302	Upgrade Cash's Corner switches 213576 and 213579 and line leads to 4000A continuous current rating of 230 kV line No. 2135		Dominion (100%)
b3800.303	Upgrade Gordonsville substation line leads to 4000A continuous current rating of 230 kV line No. 2135		Dominion (100%)
b3800.304	Upgrade Charlottesville substation switch 205415 and line leads to 4000A continuous current rating of 230 kV line No. 2054		Dominion (100%)
b3800.305	Install one 230 kV 300 MVAR STATCOM and associated equipment at Beaumeade 230 kV substation		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.306	Install one 500 kV, 150 MVAR Shunt Capacitor Bank and associated equipment at Morrisville substation. This addition will require a control house expansion to accommodate for two new panels		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3800.307	Install one 500 kV, 300 MVAR STATCOM and associated equipment at Mars substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.308	Install one 230 kV, 150 MVAR Shunt Capacitor Bank and associated equipment at Mars substation		Dominion (100%)
b3800.309	Install one 230 kV, 150 MVAR Shunt Capacitor Bank and associated equipment at Wishing Star substation		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.310	Install one 500 kV, 293.8 MVAR Shunt Capacitor Bank & associated equipment at Wishing Star substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3800.311	Rebuild 500 kV line No. 545 Bristers - Morrisville as a single circuit monopole line to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (91.07%) / PEPCO (8.93%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.312	Rebuild 500 kV line No. 569 Loudoun - Morrisville to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (11.72%) / Dominion (88.28%)
b3800.313	Rebuild approximately 10.29 miles 500 kV line segment of line No. 535 (Meadow Brook to Loudoun) to accommodate the new 500 kV line in the existing ROW		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.93%) / BGE (6.86%) / Dominion (70.92%) / PEPCO (8.29%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.314	Rebuild approximately 4.83 miles of 500 kV line No. 546 Mosby - Wishing Star to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 4357 MVA. Upgrade and install equipment at Mosby substation to upgrade terminal equipment to be rated for 5000A for 500 kV line No. 546		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** APS (41.98%) / Dominion (34.03%) / PEPCO (23.99%)
b3800.315	Rebuild approximately 4.59 miles of 500 kV line No. 590 Mosby - Wishing Star to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 4357 MVA. Upgrade and install equipment at Mosby substation to upgrade terminal equipment to be rated for 5000A for 500 kV line No. 590		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** APS (41.98%) / Dominion (34.03%) / PEPCO (23.99%)
b3800.316	Rebuild approximately 6.17 miles of 230 kV line No. 2030 Gainesville - Mint Springs to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.317	Rebuild approximately 1.58 miles of 230 kV line No. 2030 Mint Springs - Loudoun to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.318	Rebuild approximately 4.2 miles of 230 kV line No. 2045 Loudoun - North Star to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.319	Rebuild approximately 0.88 miles of 230 kV line No. 2045 North Star - Brambleton to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.320	Rebuild approximately 1.22 miles of 230 kV line No. 2227 Brambleton - Racefield to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.321	Rebuild approximately 3.69 miles of 230 kV line No. 2094 Racefield - Loudoun to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.322	Rebuild approximately 9.16 miles of 230 kV line No. 2101 Bristers - Nokesville to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.323	Rebuild approximately 2.89 miles of 230 kV line No. 2101 Nokesville - Vint Hill TP to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.324	Rebuild approximately 0.33 miles of 230 kV line No. 2101 Vint Hill TP - Vint Hill to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.325	Rebuild approximately 3.32 miles of 230 kV line No. 2114 Rollins Ford - Vint Hill to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.326	Rebuild approximately 10.09 miles of 230 kV line No. 2114 Vint Hill - Elk Run to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.327	Rebuild approximately 4.43 miles of 230 kV line No. 2140 Heathcote - Catharpin to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.328	Rebuild approximately 2.88 miles of 230 kV line No. 2140 Catharpin - Loudoun to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.329	Rebuild approximately 0.25 miles of 230 kV line No. 2151 Railroad DP - Gainesville to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.330	Rebuild approximately 4.14 miles of 230 kV line No. 2163 Vint Hill - Liberty to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.331	Rebuild approximately 0.48 miles of 230 kV line No. 2176 Heathcote - Gainesville to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.332	Rebuild approximately 1.11 miles of 230 kV line No. 2222 Rollins Ford - Gainesville to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.333	Rebuild approximately 1.65 miles of 115 kV line No. 183 Bristers - Ox to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.334	Replace four overdutied 230 kV breakers at Loudoun Substation with 80 kA breakers		Dominion (100%)
b3800.335	Replace one overdutied 500 kV breaker at Ox Substation with a 63 kA breaker		Dominion (100%)
b3800.336	Upgrade and install equipment at Bristers substation to support the new conductor 5000A rating for 500 kV line No. 545		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (91.07%) / PEPCO (8.93%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.337	Upgrade and install equipment at Brambleton substation to support the new conductor termination. All terminal equipment for 230 kV lines No. 2045 and No. 2094 to be rated for 4000A continuous current rating		Dominion (100%)
b3800.338	Revise relay settings at Dawkins Branch 230 kV station		Dominion (100%)
b3800.339	Upgrade and install equipment at Gainesville 230 kV substation to support the new conductor termination. All terminal equipment for 230 kV line No. 2030 to be rated for 4000A continuous current rating		Dominion (100%)
b3800.340	Revise relay settings at Heathcote 230 kV station		Dominion (100%)
b3800.341	Upgrade and install equipment at Loudoun substation for 230 kV line No. 2094 Loudoun - Racefield to be rated for 4000A continuous current rating		Dominion (100%)
b3800.342	Upgrade and install equipment at Loudoun substation for 230 kV line No. 2045 Loudoun - North Star to be rated for 4000A continuous current rating		Dominion (100%)
b3800.343	Upgrade and install equipment at Loudoun substation for 230 kV line No. 2030 Loudoun - Mint Springs to be rated for 4000A continuous current rating		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.344	Upgrade and install equipment at Loudoun substation to support the new conductor 5000A rating for 500 kV line No. 569 Loudoun - Morrisville		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (11.72%) / Dominion (88.28%)
b3800.345	Revise relay settings at 230 kV Mint Springs station		Dominion (100%)
b3800.346	Upgrade and install equipment at Morrisville substation to support the new 500 kV conductor termination. All terminal equipment to be rated for 5000A for 500 kV line No. 545 and No. 569. Upgrade 500 kV bus 2 to 5000A		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (11.72%) / Dominion (88.28%)
b3800.347	Revise relay settings at North Star 230 kV station		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.348	Revise relay settings at Racefield 230 kV station		Dominion (100%)
b3800.349	Revise relay settings at Railroad 230 kV station		Dominion (100%)
b3800.350	Install terminal equipment at Vint Hill 500 kV substation to support a 5000A line to 500 kV Morrisville substation. Update relay settings for 230 kV lines No. 2101, No. 2163, and 500 kV line No. 535		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.79%) / Dominion (90.21%)
b3800.351	Update relay settings at Vint Hill for 230 kV line No. 2101 Vint Hill - Bristers		Dominion (100%)
b3800.352	Update relay settings at Vint Hill for 230 kV line No. 2163 Vint Hill - Liberty		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.353	Update relay settings at Vint Hill for 500 kV line No. 535 Vint Hill - Loudoun		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.93%) / BGE (6.86%) / Dominion (70.92%) / PEPCO (8.29%)
b3800.354	Install terminal equipment at Wishing Star 500 kV substation to support a 5000A line to Vint Hill. Update relay settings for 500 kV lines No. 546 and No. 590		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (21.45%) / Dominion (78.55%)
b3800.355	Revise relay settings at Youngs Branch 230 kV station		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.356	Build a new 500 kV line from Vint Hill to Wishing Star. The line will be supported on single circuit monopoles. New conductor to have a summer rating of 4357 MVA. Line length is approximately 16.59 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (21.45%) / Dominion (78.55%)
b3800.357	Build a new 500 kV line from Morrisville to Vint Hill. New conductor to have a summer rating of 4357 MVA. Line length is approximately 19.71 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.79%) / Dominion (90.21%)
b3800.358	Replace single unit Locks 230/115 kV 168 MVA transformer TX No.7 with new single unit transformer with a rating of 224 MVA. Lead lines at the 115 kV level will be upgraded to 2000A		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.359	Wreck and rebuild 230 kV line No. 2090 Ladysmith CT - Summit D.P. segment as a double circuit 230 kV line to achieve a summer rating of 1573 MVA. Only one circuit will be wired at this stage. Upgrade circuit breaker leads, switches and line leads at Ladysmith CT to 4000A		Dominion (100%)
b3800.360	Wreck/Rebuild 230 kV line No. 2054 segment Charlottesville – Hollymeade Junction using double-circuit capable 230 kV poles. (The second 230 kV circuit will be wired but not have terminal ends)		Dominion (100%)
b3800.361	Rebuild 230 kV line No. 233 Charlottesville - Hydraulic Road - Barracks Road - Crozet-Dooms		Dominion (100%)
b3800.362	Rebuild 230 kV line No. 291 segment from Charlottesville - Barracks Road		Dominion (100%)
b3800.363	Rebuild 230 kV line No. 291 segment from Barracks Road - Crozet		Dominion (100%)
b3800.364	Rebuild 230 kV line No. 291 segment Crozet - Dooms		Dominion (100%)
b3800.365	Hollymeade substation Relay Revision for 230 kV line No. 2054 Charlottesville - Hollymeade		Dominion (100%)
b3800.366	Upgrade the terminal equipment at 230 kV Charlottesville station to 4000A for 230 kV line No. 2054 (Charlottesville - Hollymeade)		Dominion (100%)
b3800.367	Proffit DP substation Relay revision for 230 kV line No. 2054 Charlottesville - Hollymeade		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.368	Barracks Road substation relay reset to accommodate the rebuilt line 230 kV lines No. 233 and No. 291		Dominion (100%)
b3800.369	Crozet substation relay reset to accommodate the rebuilt 230 kV lines No. 233 and No. 291		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.370	Charlottesville 230 kV substation terminal equipment upgrade for 230 kV lines No. 233 and No. 291 rebuild		Dominion (100%)
b3800.371	Upgrade Hydraulic Road substation equipment for 230 kV line No. 233 and No. 291 rebuild		Dominion (100%)
b3800.372	Dooms substation terminal equipment upgrade for 230 kV line No. 233 and No. 291 rebuild		Dominion (100%)
b3800.373	Wreck and rebuild approximately 7.14 miles of 230 kV line No. 256 from St. Johns to structure 256/108 to achieve a summer rating of 1573 MVA. Line switch 25666 at St. Johns to be upgraded to 4000A		Dominion (100%)
b3800.374	Reconductor approximately 5.30 miles of 230 kV line No. 256 from Ladysmith CT to structure 256/107 to achieve a summer rating of 1573 MVA. Terminal equipment at remote end substations will be upgraded to 4000A		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.375	Construct new Woodside – Goose Creek 500 kV line for approximately 3 miles on single circuit monopole structures within the Doubs – Goose Creek corridor. (Dominion Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** (APS 9.26%) / BGE (7.30%) / Dominion (72.31%) / PEPCO (11.13%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.401	Replace Ashburn 230 kV breaker SC432 with a breaker rated 63 kA		Dominion (100%)
b3800.402	Replace Beaumeade 230 kV breaker 227T2152 with a breaker rated 80 kA		Dominion (100%)
b3800.403	Replace BECO 230 kV breakers 215012 and H12T2150 with breakers rated 63 kA		Dominion (100%)
b3800.404	Replace Belmont 230 kV breaker 227T2180 with a breaker rated 80 kA		Dominion (100%)
b3800.405	Replace Brambleton 230 kV breakers 20102, 20602, 204502, 209402, 201T2045, 206T2094 with breakers rated 80 kA		Dominion (100%)
b3800.406	Replace Gainesville 230 kV breaker 216192 with a breaker rated 80 kA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.407	Replace Loudoun 230 kV breakers 204552, 217352 with breakers rated 80 kA		Dominion (100%)
b3800.408	Replace Ox 230 kV breakers 22042, 24342, 24842, 220T2063, 243T2097, 248T2013, H342 with breakers rated 80 kA		Dominion (100%)
b3800.409	Replace Paragon Park 230 kV breakers 208132, 215032, 2081T2206, 2150T2207 with breakers rated 80 kA		Dominion (100%)
b3800.410	Replace Reston 230 kV breaker 264T2015 with a breaker rated 63 kA		Dominion (100%)
b3800.411	Replace Stonewater 230 kV breakers 20662-1, 20662-2, 217862-1, 217862-2 with breakers rated 80 kA		Dominion (100%)
b3800.412	Replace Waxpool 230 kV breakers 214922-5, 214922-6, 216622-5, 216622-6 with breakers rated 63 kA		Dominion (100%)
b3850.1	Rebuild approximately 13.51 miles of 500 kV Line #588 from structure 588/184 inside Yadkin substation to structure 588/254 outside of Fentress substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3850.2	Line No. 588 terminal equipment at Yadkin substation will be upgraded to a rating of 5000A. Since the new 500 kV line will be using fiber, the wave trap will be removed and the line protection scheme will be updated	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3850.3	At Fentress substation, since the new 500 kV line will be using fiber, the wave trap will be removed and the line protection scheme will be updated	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3853.1	Replace over duty Ladysmith CT 230 kV circuit breakers SX1272 and SX3472 with an interrupting rating of 63 kA		Dominion (100%)
b3854.1	Replace over duty Carson 230 kV circuit breakers 200272 and 24972-3 with an interrupting rating of 63 kA		Dominion (100%)
b3921.1	Wreck and rebuild 115 kV Line 119 from structure 119/305 (Merck No. 5 substation) to 119/411A (Port Republic Substation). The existing structures shall be replaced one for one within the existing ROW using primarily custom engineered double circuit 115 kV steel structures on concrete foundations. The line will be rebuilt with 3-phase 1-768.2 ACSS/TW/HS (20/7) 250 MOT "Maumee" conductor and two (2) DNO-11410 OPGW. The rebuild includes the installation of double circuit structures but assumes the second circuit will not be installed as part of this project, and that the vacant conductor arms should not be utilized without acquiring additional ROW. This scope assumes project GITAE2029C will be completed prior to the construction of this project. Project GITAE2029C serves to install Port Republic substation, which will split Line 119 in between existing structures 119/411 and 119/412		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3921.2	Uprate the 397.5 ACSR jumpers and associated equipment to meet the line conductor rating of 393 MVA		Dominion (100%)
b3922.1	This project serves to wreck and rebuild 115 kV line 1031 from structure 1031/220 to structure 1031/329. The existing structures to be removed are primarily single circuit wood, steel or concrete monopoles. The existing structures to be removed were primarily constructed in 1993 with the weathering steel structures being constructed in 2011. The existing structures shall be replaced one for one within the existing ROW using single circuit steel monopoles on foundations. The line will be rebuilt with single circuit 3-phase 768.2 ACSS/TW/HS (20/7) “Maumee” conductor and single (1) DNO-11410 OPGW, respectively		Dominion (100%)
b3928.1	Install (1) 230 kV, 50 MVAR shunt capacitor bank and associated equipment including breaker at Navy North substation		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3929.1	Rebuild approximately 33.09 miles of 500 kV line No. 579 from structure 579/1 inside Septa substation to structure 579/193 inside Yadkin substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3929.2	At Septa substation, upgrade CB (579T586), breaker switches (56288, 57985, 58688 & 57988), and line leads to 5000A rating to support Line No. 579 rebuild		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3929.3	At Yadkin substation, upgrade line leads to 5000A rating to support Line No. 579 rebuild		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3929.4	Rebuild approximately 7.7 miles of 230 kV Line No. 2110 Suffolk – Thrasher that share the double circuit towers under Line No. 579		Dominion (100%)
b3937.1	2024W1 DVP P5 Solution #1 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP01		(Dominion (100%)
b3937.2	2024W1 DVP P5 Solution #2 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP02		Dominion (100%)
b3937.3	2024W1 DVP P5 Solution #3 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP03		Dominion (100%)
b3937.4	2024W1 DVP P5 Solution #4 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP04		Dominion (100%)
b3937.5	2024W1 DVP P5 Solution #5 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP05		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3937.6	2024W1 DVP P5 Solution #6 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP06		Dominion (100%)
b3937.7	2024W1 DVP P5 Solution #7 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP07		Dominion (100%)
b3937.8	2024W1 DVP P5 Solution #8 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP08		Dominion (100%)
b3937.9	2024W1 DVP P5 Solution #9 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP09		Dominion (100%)
b3937.10	2024W1 DVP P5 Solution #10 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP10		Dominion (100%)
b3937.11	2024W1 DVP P5 Solution #11 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP11		Dominion (100%)
b3937.12	2024W1 DVP P5 Solution #12 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP12		Dominion (100%)
b3937.13	2024W1 DVP P5 Solution #13 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP13		Dominion (100%)
b3937.14	2024W1 DVP P5 Solution #14 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP14		Dominion (100%)
b3937.15	2024W1 DVP P5 Solution #15 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP15		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3937.16	2024W1 DVP P5 Solution #16 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP16		Dominion (100%)
b3937.17	2024W1 DVP P5 Solution #17 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP17		Dominion (100%)
b3937.18	2024W1 DVP P5 Solution #18 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP18		Dominion (100%)
b3937.19	2024W1 DVP P5 Solution #19 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP19		Dominion (100%)
b3937.20	2024W1 DVP P5 Solution #20 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP20		Dominion (100%)
b3937.21	2024W1 DVP P5 Solution #21 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP21		Dominion (100%)
b3937.22	2024W1 DVP P5 Solution #22 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP23		Dominion (100%)
b3937.23	2024W1 DVP P5 Solution #23 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP24		Dominion (100%)
b3937.24	2024W1 DVP P5 Solution #24 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP26		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3937.25	2024W1 DVP P5 Solution #25 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP27		Dominion (100%)
b3937.26	2024W1 DVP P5 Solution #26 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP28		Dominion (100%)
b3937.27	2024W1 DVP P5 Solution #27 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP29		Dominion (100%)
b3937.28	2024W1 DVP P5 Solution #28 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP30		Dominion (100%)
b3937.29	2024W1 DVP P5 Solution #29 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP31		Dominion (100%)
b3937.30	2024W1 DVP P5 Solution #30 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP32		Dominion (100%)
b3937.31	2024W1 DVP P5 Solution #31 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP33		Dominion (100%)
b3937.32	2024W1 DVP P5 Solution #32 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP34		Dominion (100%)
b3937.33	2024W1 DVP P5 Solution #33 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP35		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3937.34	2024W1 DVP P5 Solution #34 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP36		Dominion (100%)
b3937.35	2024W1 DVP P5 Solution #35 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP37		Dominion (100%)
b3937.36	2024W1 DVP P5 Solution #36 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP38		Dominion (100%)
b3937.37	2024W1 DVP P5 Solution #37 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP39		Dominion (100%)
b3937.38	2024W1 DVP P5 Solution #38 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP40		Dominion (100%)
b3937.39	2024W1 DVP P5 Solution #39 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP41		Dominion (100%)
b3938.1	2024W1 DVP P5 Solution No. 40 – Replace and upgrade relay and associated equipment at DVP substation, addressing FG No. 2024-P5-DVP16		Dominion (100%)
b3938.2	2024W1 DVP P5 Solution No. 41 – Replace and upgrade relay and associated equipment at DVP substation, addressing FG No. 2024-P5-DVP23		Dominion (100%)
b3938.3	2024W1 DVP P5 Solution No. 42 – Replace and upgrade relay and associated equipment at DVP substation, addressing FG No. 2024-P5-DVP14		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3938.6	2024W1 DVP P5 Solution No. 45 – Replace and upgrade relay and associated equipment at DVP substation, addressing FG No. 2024-P5-DVP03		Dominion (100%)
b4000.100	At Ashburn substation 230 kV replace 50 kA breaker SC332 with 63 kA		Dominion (100%)
b4000.101	At Beaumeade substation 230 kV replace 63 kA breaker 274T2206 with 80 kA		Dominion (100%)
b4000.102	At Braddock substation 230 kV replace 40 kA breakers 207T294, 237T294, 237T297, 281T297 with 63 kA		Dominion (100%)
b4000.103	At Brambleton substation 230 kV replace 63 kA breakers 217202, 2172T2183, L102, and L202 with 80 kA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.104	At Bristers substation 230 kV replace 40 kA and 50 kA breakers H1TH2, H2TH3 and L1T2101 with 63 kA		Dominion (100%)
b4000.105	At Bull Run substation 230 kV replace 50 kA breaker H362 with 63 kA		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.106	At Buttermilk substation 230 kV replace 63 kA breakers 215212, 217012, 220312, 221412, and 2152T2203 with 80 kA		Dominion (100%)
b4000.107	At Cabin Run substation 230 kV replace 63 kA breakers 209512, 221312, and T122 with 80 kA		Dominion (100%)
b4000.108	At Carson substation 230 kV replace 40 kA breaker 23872 with 63 kA		Dominion (100%)
b4000.109	At Clifton substation 230 kV replace 63 kA breakers 201182, SR182, and XT2011 with 80 kA		Dominion (100%)
b4000.111	At Evergreen Mills substation 230 kV, replace 63 kA breakers H132, H232 with 80 kA		Dominion (100%)
b4000.112	At Goose Creek substation 230 kV, replace 63 kA breaker L1T227 with 80 kA		Dominion (100%)
b4000.113	At Goose Creek substation 500 kV, replace 50 kA breaker SC182 with 63 kA		Dominion (100%)
b4000.114	At Ladysmith S1 substation 230 kV, replace 40 kA breakers 25672, 209072, 256T2090, GT172, GT272, GT372, GT472, GT572 with 63 kA		Dominion (100%)
b4000.115	At Ladysmith substation 500 kV, replace 40 kA breaker 574T581 with 63 kA		Dominion (100%)
b4000.116	At Liberty substation 230 kV, replace 50 kA breaker SC112 with 63 kA		Dominion (100%)
b4000.117	At Lockridge substation 230 kV, replace 63 kA breakers 218872, H12T2188, 222372, and H12T2223 with 80 kA		Dominion (100%)
b4000.118	At Loudoun substation 230 kV, replace 63 kA breakers 209452, L152, and L252 with 80 kA		Dominion (100%)
b4000.119	At Loudoun Cap substation 230 kV, replace 50 kA breaker SC352 with 63 kA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.120	At Loudoun substation 500 kV, replace 50 kA breakers 502T535, 569T584, H1T569, H2T502, H2T584, and SC152 with 63 kA		Dominion (100%)
b4000.121	At Marsh Run substation 230 kV, replace 50 kA breaker 28002, 29902, 280T2039, 299T2040, 203902, and 204002 with 63 kA		Dominion (100%)
b4000.122	At Morrisville substation 230 kV, replace 50 kA breaker L1T2039, L1T2040, L2T2039, and L2T2040 with 63 kA		Dominion (100%)
b4000.123	At Morrisville substation 500 kV, replace 50 kA breakers H1T541, H1T594, H2T545, H2T569, and SC122 with 63 kA		Dominion (100%)
b4000.124	At Mosby substation 500 kV, replace 50 kA breakers 50272, 54672, 55972, 58472, 59072, 502T546, 559T584, SC172, SV172, SV272, and XT590 with 63 kA		Dominion (100%)
b4000.125	At Mt Storm substation 500 kV, replace 40 kA breaker G3T572X with 63 kA		Dominion (100%)
b4000.126	At Nimbus substation 230 kV, replace 63 kA breakers 215282, 225532-5, 225532-6, 226034 with 80 kA		Dominion (100%)
b4000.127	At NIVO 1 substation 230 kV, replace 63 kA breaker 2116T2130 with 80 kA (4-breaker ring bus)		Dominion (100%)
b4000.128	At North Anna substation 500 kV, replace 40 kA breakers 57502, G102-1, G102-2, G202, G2T575, and XT573 with 63 kA		Dominion (100%)
b4000.129	At Ox substation 230 kV, replace 50 kA and 63 kA breakers 201342, 209742, 206342, and SC242 with 80 kA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.130	At Ox substation 500 kV, replace 40 kA breakers 56142, H1T539, and H2T539 with 63 kA		Dominion (100%)
b4000.131	At Paragon Park substation 230 kV, replace 63 kA breakers 220632 and 220732 with 80 kA		Dominion (100%)
b4000.132	At Pleasantview substation 230 kV, replace 63 kA breakers 203T274 and 274T2098 with 80 kA		Dominion (100%)
b4000.133	At Pleasantview substation 500 kV, replace 40 kA breaker H322 with 63 kA		Dominion (100%)
b4000.134	At Remington substation 230 kV, replace 40 kA and 50 kA breakers 211462, GT162, GT262, GT362, GT462, 2077T2086, 208662, H962, and H9T299 with 63 kA		Dominion (100%)
b4000.135	At Roundtable substation 230 kV, replace 63 kA breakers 203102, 214902, 221402, 222302, 2031T2223, and 2149T2214 with 80 kA		Dominion (100%)
b4000.136	At Vint Hill substation 230 kV, replace 63 kA breakers 2101T2174, 2163T2174, and 2101T2163 with 80 kA		Dominion (100%)
b4000.137	At Yardley substation 230 kV, replace 63 kA breakers WT2209, WT2213, XT2209, and XT2213 with 80 kA		Dominion (100%)
b4000.300	Rebuild approximately 1.71 miles of 230 kV Line 299 from the Marsh Run substation to the Remington CT substation. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.301	Reconductor approximately 1.24 miles of 230 kV Line 280 from Remington – Marsh Run CT substation. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.302	Uprate Line No. 299 terminal equipment, line leads, and bus at Marsh Run substation to be rated to 4000A		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.303	Uprate Line No. 299 terminal equipment, line leads, and bus at Remington CT substation to be rated to 4000A		Dominion (100%)
b4000.304	Partial reconductor/partial wreck & rebuild of 230 kV Line No. 2161 Gainesville – Wheeler. New conductor has a summer rating of 1573 MVA (Wheeler – Linton Tap segment)		Dominion (100%)
b4000.305	Partial reconductor/partial wreck & rebuild of 230 kV Line No. 2161 Gainesville – Wheeler. New conductor has a summer rating of 1573 MVA (Linton Tap – Atlantic segment)		Dominion (100%)
b4000.306	Partial reconductor/partial wreck & rebuild of 230 kV Line No. 2161 Gainesville – Wheeler. New conductor has a summer rating of 1573 MVA (Atlantic – Trident segment)		Dominion (100%)
b4000.307	Partial reconductor/partial wreck & rebuild of 230 kV Line No. 2161 Gainesville – Wheeler. New conductor has a summer rating of 1573 MVA (Trident – Gainesville segment)		Dominion (100%)
b4000.308	Upgrade all Line No. 2161 terminal equipment at Gainesville to 4000A. A CCVT will also be replaced due to aging		Dominion (100%)
b4000.309	Upgrade all Line No. 2161 terminal equipment Wheeler substation to 4000A		Dominion (100%)
b4000.310	Revise relay settings at Trident substation		Dominion (100%)
b4000.311	Rebuild 230 kV Line No. 213 and No. 225 from Thelma – Lakeview. New conductor has a summer rating of 1573 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.312	At Thelma substation, upgrade line lead, wave traps (213WT & 225WT), circuit breaker leads to 4000A. CB switches 22535, 23235, 23238 and 21335 will also be upgrade to 4000A DEB switches. CCVTs 213P1, 213P2 and 213P3 will be replaced due to aging		Dominion (100%)
b4000.313	At Lakeview substation, upgrade wave traps 213WT and 225WT, line leads, and circuit breaker leads to 4000A. Upgrade CB switches 22565 and 22564 to 4000A double-end break switches. Replace CCVTs 225P1, 225P2, and 225P3 due to aging		Dominion (100%)
b4000.314	Reconductor 230 kV Line No. 2003 Chesterfield – Tyler segment. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.315	Reconductor 230 kV Line No. 2003 Tyler – Poe segment. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.316	At Poe substation, uprate all Line No. 2003 terminal equipment, line leads, and bus to be rated to 4000A		Dominion (100%)
b4000.317	At Tyler substation, upgrade the necessary line terminal equipment to maintain 4000A at Tyler substation		Dominion (100%)
b4000.318	Revise relay settings at Chesterfield substation		Dominion (100%)
b4000.319	Reconductor 230 kV Line No. 2002 Carson – Poe. New conductor has a summer rating of 1573 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.320	At Carson substation, upgrade all Line No. 2002 terminal equipment at Carson to 4000A. CCVTs will also be replaced due to aging		Dominion (100%)
b4000.321	At Poe substation, upgrade all Line No. 2002 terminal equipment at Carson to 4000A. CCVTs will also be replaced due to aging		Dominion (100%)
b4000.322	Build a new 230 kV Line from Nokesville – Hornbaker using the vacant arms of the double circuit monopole structures installed as part of previous project 993027. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.323	Upgrade terminal equipment at Nokesville substation. The project adds one more line to Nokesville, including the installation of one 230 kV breaker and two 230 kV switches		Dominion (100%)
b4000.324	Upgrade terminal equipment at Hornbaker substation. This project is for installing a new 230 kV 4000A rated line terminal at Hornbaker to accommodate the new line to Nokesville		Dominion (100%)
b4000.325	Build a new 26.38 miles 230 kV line from Elmont to Ladysmith on the existing 5-2 structures between the two stations. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.326	At Elmont substation, install/upgrade associated equipment to accommodate a 4000A line rating for the new 230 kV line between Elmont and Ladysmith		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.327	Upgrade/install equipment at Ladysmith substation to 4000A. Expansion will be required to accommodate a total of three (3) new 230 kV strings of breaker and a half scheme		Dominion (100%)
b4000.328	Construct a new 24.5 miles 230 kV Line 9482 from Cloverhill substation to Ox substation		Dominion (100%)
b4000.329	At Ox substation, install the necessary associated equipment to accommodate the new Line No. 9482 between Cloverhill and Ox. This project also includes expanding the substation with associated security level 1 fencing and super post structure needed		Dominion (100%)
b4000.330	At Cloverhill substation, install the necessary associated equipment to accommodate the new line between Cloverhill and Ox. This project also includes demolishing and reconstructing the existing bus system and roadway		Dominion (100%)
b4000.331	Construct a new 230 kV single circuit line from Raines substation to Cloud substation to solve electrical violations cause by the significant load growth in South Hill, Virginia. The scope also includes an idle 230 kV circuit being installed between these stations		Dominion (100%)
b4000.332	At Cloud substation, upgrade substation terminal equipment to 4000A		Dominion (100%)
b4000.333	At Raines substation, upgrade substation terminal equipment to 4000A		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.334	Reconductor 115 kV Line No. 121 from Poe to Prince George. Specifically, Line No. 121 will be reconductored and converted to 230 kV from Poe substation to Prince George substation		Dominion (100%)
b4000.335	At Poe substation, install a new 230 kV six breaker ultimate ring bus which will fit the station to current 230 kV standards. The substation scope includes the installation of 230 kV breaker and half GIS bus. Work at Poe substation is associated with Line No. 121 reconductor		Dominion (100%)
b4000.336	Build a new 230/115 kV Prince George substation along the existing 115 or 230 kV corridor. The substation scope includes the installation of 230 kV breakers & 1-115 kV breaker along with its associated terminal equipment initially but will have provision for making it a 6-breaker ring (both 230 and 115 kV) in future. The existing 230-115 kV transformer at Prince George will be relocated to serve this new substation		Dominion (100%)
b4000.337	Extend a new 230 kV line approximately 7.85 miles between the existing Morrisville and Anderson Branch substations. The existing tower structures currently supporting the Bristers to Morrisville 500 kV Line No. 545 will be used to support this new line as shared tower structures		Dominion (100%)
b4000.338	At Morrisville substation, install/upgrade substation terminal equipment to 4000A		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.339	At Anderson Branch substation, install/upgrade substation terminal equipment to 4000A		Dominion (100%)
b4000.340	Uprate existing Goose Creek 500/230 kV transformer to 1440 MVA		Dominion (100%)
b4000.341	Remove the 500 kV conductor previously planned to terminate into the Vint Hill 500 kV substation and extend approximately 0.2 miles of conductor to fly-over the site		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** Dominion (100.00%)
b4000.342	Remove the terminal equipment and substation work required for the termination of the Morrisville – Wishing Star 500 kV line into Vint Hill		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** Dominion (100.00%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.343	Uprate bus at Brambleton to support 500 kV Line No. 558 (Aspen – Brambleton) uprate		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100.00%)
b4000.344	Build a 500 kV line from North Anna substation (bypassing Ladysmith Substation) to a new substation called Kraken. New conductor to have a minimum summer normal rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (91.69%)/ PEPCO (8.31%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.345	Build a 500 kV line from a new substation called Kraken to a new substation called Yeat. New conductor to have a minimum summer normal rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100.00%)
b4000.347	Upgrade/install equipment at North Anna substation to 5000A to support the new conductor rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (91.69%) / PEPCO (8.31%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.349	Update relay settings at Ladysmith to change the destination of 500 kV Line No. 568 from Possum Point to Kraken		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (13.28%) / Dominion (64.48%) / PEPCO (22.24%)
b4000.350	Update relay settings at Possum Point to change the destination of 500 kV Line No. 568 from Ladysmith to Kraken		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (8.30%) / Dominion (78.64%) / PEPCO (13.06%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4000.351	Cut in Line No. 568 Ladysmith – Possum Point into Kraken, creating Line No. 9517 Ladysmith to Kraken	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (8.30%) / Dominion (78.64%) / PEPCO (13.06%)
b4000.352	Cut in line Ladysmith – Possum Point into Kraken, creating new Line No. 568 Kraken to Possum Point	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (13.28%) / Dominion (64.48%) / PEPCO (22.24%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.353	Upgrade 500 kV terminal equipment at Elmont substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.79%) / BGE (6.14%) / Dominion (75.61%) / PEPCO (8.46%)
b4000.354	Expand Ladysmith substation to add redundant circuit breakers to the middle breakers on both 500 kV strings (574T575 and 568T581). The equipment including switches 57518, 57515, and H115 will be replaced with 5000A equipment		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.79%) / BGE (6.14%) / Dominion (75.61%) / PEPCO (8.46%)
b4000.360	Replace two switches, a wave trap and leads to upgrade all related substation equipment to 2000A at Altavista 138 kV substation		Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.1	Chesterfield - Basin 230 kV rebuild: Wreck and rebuild approximately 12.5 miles of Chesterfield - Basin 230 kV line		~~Dominion (100%)~~AEC (0.39%) / AEP (0.58%) / APS (0.94%) / ATSI (3.48%) / BGE (2.10%) / ComEd (0.44%) / DL (1.05%) / Dominion (83.53%) / DPL (0.71%)/ JCPL (0.75%) / ME (0.28%) / NEPTUNE* (0.08%)/ PECO (1.41%)/ PEPCO (2.43%) / PPL (0.53%) / PSEG (1.25%) / RE (0.05%)
b4030.2	Chesterfield - Hopewell 230 kV reconductor: Reconductor 230 kV lines No. 211 and No. 228 between the existing Chesterfield-Hopewell 230 kV substation. Each line reconductor is approximately 3 miles long		~~Dominion (100%)~~AEC (1.11%) / AEP (1.79%) / APS (2.66%) / ATSI (9.97%) / BGE (6.01%) / ComEd (1.23%) / Dayton (0.08%) / DEOK (1.15%) / DL (3.04%) / Dominion (50.96%) / DPL (2.00%) / EKPC (0.27%) / JCPL (2.11%) / ME (0.80%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.98%) / PENELEC (0.45%) / PEPCO (7.00%) / PPL (1.49%) / PSEG (3.52%) / RE (0.13%)
b4030.3	Basin 230 kV substation scope: Replace all terminal equipment, line leads, and bus at Basin 230 kV substation to be rated to 4000A		~~Dominion (100%)~~AEC (0.39%) / AEP (0.58%) / APS (0.94%) / ATSI (3.48%) / BGE (2.10%) / ComEd (0.44%) / DL (1.05%) / Dominion (83.53%) / DPL (0.71%)/ JCPL (0.75%) / ME (0.28%) / NEPTUNE* (0.08%)/ PECO (1.41%)/ PEPCO (2.43%) / PPL (0.53%) / PSEG (1.25%) / RE (0.05%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.4	Chesterfield 230 kV substation scope: Replace all terminal equipment, line leads, and bus at Chesterfield 230 kV substation to be rated to 4000A		~~Dominion (100%)~~AEC (0.39%) / AEP (0.58%) / APS (0.94%) / ATSI (3.48%) / BGE (2.10%) / ComEd (0.44%) / DL (1.05%) / Dominion (83.53%) / DPL (0.71%)/ JCPL (0.75%) / ME (0.28%) / NEPTUNE* (0.08%)/ PECO (1.41%)/ PEPCO (2.43%) / PPL (0.53%) / PSEG (1.25%) / RE (0.05%)
b4030.5	Chesterfield 230 kV substation scope: Install a new 230 kV, 80kA 4000A circuit breaker at Chesterfield 230 kV substation		~~Dominion (100%)~~AEC (1.11%) / AEP (1.79%) / APS (2.66%) / ATSI (9.97%) / BGE (6.01%) / ComEd (1.23%) / Dayton (0.08%) / DEOK (1.15%) / DL (3.04%) / Dominion (50.96%) / DPL (2.00%) / EKPC (0.27%) / JCPL (2.11%) / ME (0.80%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.98%) / PENELEC (0.45%) / PEPCO (7.00%) / PPL (1.49%) / PSEG (3.52%) / RE (0.13%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4030.6	Suffolk - Yadkin 500 kV rebuild: Rebuild approximately 13.2 miles of Suffolk - Yadkin 500 kV Line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (100%)~~AEC (1.32%) / AEP (27.31%) / APS (0.26%) / ATSI (0.11%) / BGE (0.06%) / ComEd (0.10%) / Dayton (3.19%) / DEOK (6.22%) / DL (0.10%) / Dominion (37.28%) / DPL (1.67%) / EKPC (4.12%) / JCPL (3.83%) / ME (0.07%) / NEPTUNE* (0.43%) / OVEC (0.09%) / PECO (4.49%) / PENELEC (1.03%) / PEPCO (0.19%) / PPL (0.14%) / PSEG (7.71%)/ RE (0.28%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4030.7	Suffolk 500 kV substation scope: Replace all terminal equipment at Suffolk 500 kV substation to be rated to 5000A		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (100%)~~AEC (1.32%) / AEP (27.31%) / APS (0.26%) / ATSI (0.11%) / BGE (0.06%) / ComEd (0.10%) / Dayton (3.19%) / DEOK (6.22%) / DL (0.10%) / Dominion (37.28%) / DPL (1.67%) / EKPC (4.12%) / JCPL (3.83%) / ME (0.07%) / NEPTUNE* (0.43%) / OVEC (0.09%) / PECO (4.49%) / PENELEC (1.03%) / PEPCO (0.19%) / PPL (0.14%) / PSEG (7.71%)/ RE (0.28%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.8	Yadkin 500 kV substation scope: Replace all terminal equipment at Yadkin 500 kV substation to be rated to 5000A		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (100%)~~AEC (1.32%) / AEP (27.31%) / APS (0.26%) / ATSI (0.11%) / BGE (0.06%) / ComEd (0.10%) / Dayton (3.19%) / DEOK (6.22%) / DL (0.10%) / Dominion (37.28%) / DPL (1.67%) / EKPC (4.12%) / JCPL (3.83%) / ME (0.07%) / NEPTUNE* (0.43%) / OVEC (0.09%) / PECO (4.49%) / PENELEC (1.03%) / PEPCO (0.19%) / PPL (0.14%) / PSEG (7.71%)/ RE (0.28%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.9	Charlottesville - Fork Union 230 kV rebuild: Wreck and rebuild approximately 24 miles of Charlottesville - Fork Union 230 kV line		~~Dominion (100%)~~AEC (0.89%) / AEP (4.25%) / APS (1.41%) / ATSI (12.51%) / BGE (0.70%) / ComEd (1.65%) / Dayton (0.46%) / DEOK (1.50%) / DL (3.88%) / Dominion (57.84%) / DPL (1.34%) / EKPC (0.81%) / JCPL (2.17%) / ME (0.43%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.13%) / PENELEC (0.25%) / PEPCO (1.09%) / PPL (1.40%) / PSEG (3.90%) / RE (0.14%)
b4030.10	Fork Union - Bremo 230 kV rebuild: Wreck and rebuild approximately 1.74 miles of Fork Union - Bremo 230 kV line		~~Dominion (100%)~~AEC (0.43%) / AEP (1.82%) / APS (12.82%) / ATSI (6.83%) / BGE (1.04%) / ComEd (0.85%) / Dayton (0.15%) / DEOK (7.70%) / DL (2.05%) / Dominion (32.28%) / DPL (0.62%) / EKPC (2.50%) / JCPL (1.11%) / ME (3.30%) / NEPTUNE* (0.12%) / OVEC (0.04%) / PECO (1.52%) / PENELEC (0.23%) / PEPCO (13.44%) / PPL (9.02%) / PSEG (2.06%) / RE (0.07%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.11	Charlottesville 230 kV substation scope: Replace all terminal equipment at Charlottesville 230 kV substation to support the new line conductor ratings of the Charlottesville - Fork Union 230 kV rebuild		~~Dominion (100%)~~AEC (0.60%) / AEP (19.49%) / APS (6.46%) / ATSI (8.51%) / BGE (0.47%) / ComEd (1.11%) / Dayton (0.31%) / DEOK (6.85%) / DL (2.62%) / Dominion (29.01%) / DPL (0.90%) / EKPC (3.64%) / JCPL (1.46%) / ME (1.98%) / NEPTUNE* (0.16%) / OVEC (0.04%) / PECO (2.11%) / PENELEC (0.17%) / PEPCO (4.99%) / PPL (6.41%) / PSEG (2.62%) / RE (0.09%)
b4030.12	Fork Union 230 kV substation scope: Replace all terminal equipment at Fork Union 230 kV substation to support the new line conductor ratings of the Charlottesville - Fork Union 230 kV rebuild		~~Dominion (100%)~~AEC (0.89%) / AEP (4.25%) / APS (1.41%) / ATSI (12.51%) / BGE (0.70%) / ComEd (1.65%) / Dayton (0.46%) / DEOK (1.50%) / DL (3.88%) / Dominion (57.84%) / DPL (1.34%) / EKPC (0.81%) / JCPL (2.17%) / ME (0.43%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.13%) / PENELEC (0.25%) / PEPCO (1.09%) / PPL (1.40%) / PSEG (3.90%) / RE (0.14%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4030.13	Fork Union 230 kV substation scope: Replace all terminal equipment at Fork Union 230 kV substation to support the new conductor ratings of the Fork Union - Bremo 230 kV rebuild	~~Dominion (100%)~~AEC (0.43%) / AEP (1.82%) / APS (12.82%) / ATSI (6.83%) / BGE (1.04%) / ComEd (0.85%) / Dayton (0.15%) / DEOK (7.70%) / DL (2.05%) / Dominion (32.28%) / DPL (0.62%) / EKPC (2.50%) / JCPL (1.11%) / ME (3.30%) / NEPTUNE* (0.12%) / OVEC (0.04%) / PECO (1.52%) / PENELEC (0.23%) / PEPCO (13.44%) / PPL (9.02%) / PSEG (2.06%) / RE (0.07%)
b4030.14	Bremo 230 kV substation scope: Replace all terminal equipment at Bremo 230 kV substation to support the new conductor ratings of the Fork Union - Bremo 230 kV rebuild	~~Dominion (100%)~~AEC (0.43%) / AEP (1.82%) / APS (12.82%) / ATSI (6.83%) / BGE (1.04%) / ComEd (0.85%) / Dayton (0.15%) / DEOK (7.70%) / DL (2.05%) / Dominion (32.28%) / DPL (0.62%) / EKPC (2.50%) / JCPL (1.11%) / ME (3.30%) / NEPTUNE* (0.12%) / OVEC (0.04%) / PECO (1.52%) / PENELEC (0.23%) / PEPCO (13.44%) / PPL (9.02%) / PSEG (2.06%) / RE (0.07%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.15	Mt. Eagle Tap 230 kV substation scope: Upgrade disconnect switches at Mt. Eagle Tap 230 kV substation to 4000 A		~~Dominion (100%)~~AEC (0.89%) / AEP (4.25%) / APS (1.41%) / ATSI (12.51%) / BGE (0.70%) / ComEd (1.65%) / Dayton (0.46%) / DEOK (1.50%) / DL (3.88%) / Dominion (57.84%) / DPL (1.34%) / EKPC (0.81%) / JCPL (2.17%) / ME (0.43%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.13%) / PENELEC (0.25%) / PEPCO (1.09%) / PPL (1.40%) / PSEG (3.90%) / RE (0.14%)
b4030.16	Sycamore Springs 230 kV substation scope: Reset relays at Sycamore Springs 230 kV substation		~~Dominion (100%)~~AEC (1.11%) / AEP (1.79%) / APS (2.66%) / ATSI (9.97%) / BGE (6.01%) / ComEd (1.23%) / Dayton (0.08%) / DEOK (1.15%) / DL (3.04%) / Dominion (50.96%) / DPL (2.00%) / EKPC (0.27%) / JCPL (2.11%) / ME (0.80%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.98%) / PENELEC (0.45%) / PEPCO (7.00%) / PPL (1.49%) / PSEG (3.52%) / RE (0.13%)
b4031.1	Wreck and rebuild Line No. 5 using conductor with minimum summer rating of 393 MVA		Dominion (100%)
b4031.2	At Bremo substation, upgrade relevant equipment below 2000A, such as line leads, breakers, switches and CTs to accommodate the upgraded line 5		Dominion (100%)
b4031.3	At Fork Union substation, upgrade relevant equipment below 2000 A, such as line leads, breakers, switches and CTs to accommodate the upgraded line 5		Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4034.1	The existing line 2016 in the corridor will be cut into the Goalders Creek three-breaker ring bus station such that the remaining section of line going to Harmony Village will be renumbered to 2XX1		AEC (0.67%) / AEP (2.90%) / APS (2.06%) / ATSI (1.53%) / BGE (3.95%) / ComEd (10.43%) / Dayton (0.06%) / DEOK (0.26%) / DL (0.34%) / Dominion (60.33%) / DPL (1.24%) / ECP** (0.06%) / EKPC (0.43%) / HTP*** (0.04%) / JCPL (1.60%) / ME (2.14%) / NEPTUNE* (0.17%) / PECO (2.52%) / PENELEC (0.13%) / PEPCO (3.90%) / PPL (1.52%) / PSEG (3.71%) / RE (0.01%)
b4034.2	This project involves installing a new 230/115 kV TX1 transformer using a 115 kV breaker and associated switches, as well as a new 230 kV line from Lanexa and Harmony Village with a 230 kV breaker and associated switches		AEC (0.67%) / AEP (2.90%) / APS (2.06%) / ATSI (1.53%) / BGE (3.95%) / ComEd (10.43%) / Dayton (0.06%) / DEOK (0.26%) / DL (0.34%) / Dominion (60.33%) / DPL (1.24%) / ECP** (0.06%) / EKPC (0.43%) / HTP*** (0.04%) / JCPL (1.60%) / ME (2.14%) / NEPTUNE* (0.17%) / PECO (2.52%) / PENELEC (0.13%) / PEPCO (3.90%) / PPL (1.52%) / PSEG (3.71%) / RE (0.01%)
b4034.3	This project at Harmony Village substation requires a relay reset only on Line 2016 relays		AEC (0.67%) / AEP (2.90%) / APS (2.06%) / ATSI (1.53%) / BGE (3.95%) / ComEd (10.43%) / Dayton (0.06%) / DEOK (0.26%) / DL (0.34%) / Dominion (60.33%) / DPL (1.24%) / ECP** (0.06%) / EKPC (0.43%) / HTP*** (0.04%) / JCPL (1.60%) / ME (2.14%) / NEPTUNE* (0.17%) / PECO (2.52%) / PENELEC (0.13%) / PEPCO (3.90%) / PPL (1.52%) / PSEG (3.71%) / RE (0.01%)

*Neptune Regional Transmission System, LLC
** East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4034.4	This project at Lanexa substation requires a relay reset only on Line 2016 relays		AEC (0.67%) / AEP (2.90%) / APS (2.06%) / ATSI (1.53%) / BGE (3.95%) / ComEd (10.43%) / Dayton (0.06%) / DEOK (0.26%) / DL (0.34%) / Dominion (60.33%) / DPL (1.24%) / ECP** (0.06%) / EKPC (0.43%) / HTP*** (0.04%) / JCPL (1.60%) / ME (2.14%) / NEPTUNE* (0.17%) / PECO (2.52%) / PENELEC (0.13%) / PEPCO (3.90%) / PPL (1.52%) / PSEG (3.71%) / RE (0.01%)
b4052.6	Aspen 500 kV remote work for Dickerson (new 500 kV) - Aspen line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (100%)~~AEP (0.40%) / Dayton (0.11%) / Dominion (99.20%) / EKPC (0.29%)

*Neptune Regional Transmission System, LLC
** East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.1	Uprate 500 kV Line #560 terminal equipment at Possum Point substation so as not to limit the conductor rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (15.58%) / Dominion (34.85%) / ME (1.10%) / PEPCO (40.00%) / PPL (8.47%)~~AEC (0.16%) / AEP (3.00%) / APS (4.93%) / ATSI (1.22%) / BGE (13.58%) / ComEd (0.47%) / Dayton (0.36%) / DEOK (0.93%) / DL (0.17%) / Dominion (28.08%) / DPL (0.74%) / EKPC (0.51%) / JCPL (1.09%) / ME (0.89%) / NEPTUNE* (0.12%) / OVEC (0.01%) / PECO (0.53%) / PENELEC (0.09%) / PEPCO (34.86%) / PPL (7.38%) / PSEG (0.85%)/ RE (0.03%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.2	Rebuild approximately 0.19 mile segment of 500 kV Line #560 from Possum Point substation (structure 560/1A) to Burches Interconnection (structure 560/1F) using 6000A conductor		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (15.58%) / Dominion (34.85%) / ME (1.10%) / PEPCO (40.00%) / PPL (8.47%)~~AEC (0.16%) / AEP (3.00%) / APS (4.93%) / ATSI (1.22%) / BGE (13.58%) / ComEd (0.47%) / Dayton (0.36%) / DEOK (0.93%) / DL (0.17%) / Dominion (28.08%) / DPL (0.74%) / EKPC (0.51%) / JCPL (1.09%) / ME (0.89%) / NEPTUNE* (0.12%) / OVEC (0.01%) / PECO (0.53%) / PENELEC (0.09%) / PEPCO (34.86%) / PPL (7.38%) / PSEG (0.85%)/ RE (0.03%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.3	Construct a new bipolar +/- 525 kV HVDC link connecting Heritage and Mosby substations, where the link has a capability of transmitting 3000 MW. The HVDC link, approximately 185 miles in length, will be fully routed underground between the two new proposed converter stations, one at Heritage and one at Mosby	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (5.17%) / DL (1.48%) / Dominion (87.78%) / PEPCO (5.57%)~~AEC (0.76%) / AEP (0.79%) / APS (3.33%) / ATSI (3.16%) / BGE (4.17%) / ComEd (0.82%) / Dayton (0.02%) / DEOK (0.12%) / DL (1.20%) / Dominion (70.76%) / DPL (1.44%) / EKPC (0.16%) / JCPL (1.28%) / ME (0.85%) / NEPTUNE* (0.14%) / PECO (2.69%) / PENELEC (0.17%) / PEPCO (4.49%) / PPL (1.58%) / PSEG (2.00%) / RE (0.07%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.4	Design and construct a new Voltage Source Converter (VSC) HVDC station at Heritage substation to support the new HVDC link		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (5.17%) / DL (1.48%) / Dominion (87.78%) / PEPCO (5.57%)~~AEC (0.76%) / AEP (0.79%) / APS (3.33%) / ATSI (3.16%) / BGE (4.17%) / ComEd (0.82%) / Dayton (0.02%) / DEOK (0.12%) / DL (1.20%) / Dominion (70.76%) / DPL (1.44%) / EKPC (0.16%) / JCPL (1.28%) / ME (0.85%) / NEPTUNE* (0.14%) / PECO (2.69%) / PENELEC (0.17%) / PEPCO (4.49%) / PPL (1.58%) / PSEG (2.00%) / RE (0.07%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.5	Design and construct a new Voltage Source Converter (VSC) HVDC station at Mosby substation to support the new HVDC link		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (5.17%) / DL (1.48%) / Dominion (87.78%) / PEPCO (5.57%)~~AEC (0.76%) / AEP (0.79%) / APS (3.33%) / ATSI (3.16%) / BGE (4.17%) / ComEd (0.82%) / Dayton (0.02%) / DEOK (0.12%) / DL (1.20%) / Dominion (70.76%) / DPL (1.44%) / EKPC (0.16%) / JCPL (1.28%) / ME (0.85%) / NEPTUNE* (0.14%) / PECO (2.69%) / PENELEC (0.17%) / PEPCO (4.49%) / PPL (1.58%) / PSEG (2.00%) / RE (0.07%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.6	Rebuild 20 miles of 500 kV Line #576 from North Anna substation to Vontay substation using 6000A conductor		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (9.81%) / Dominion (77.75%) / PEPCO (12.44%)~~AEC (0.29%) / AEP (36.57%) / APS (2.18%) / ATSI (0.06%) / BGE (2.72%) / ComEd (0.27%) / Dayton (6.00%) / DEOK (16.17%) / DL (0.23%) / Dominion (21.57%) / DPL (0.62%) / EKPC (7.10%) / JCPL (0.35%) / ME (0.35%) / NEPTUNE* (0.04%) / OVEC (0.12%) / PECO (1.04%) / PENELEC (0.03%) / PEPCO (3.45%) / PPL (0.38%) / PSEG (0.44%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.7	Upgrade/install 6000A equipment at North Anna substation to support the new conductor termination		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (9.81%) / Dominion (77.75%) / PEPCO (12.44%)~~AEC (0.29%) / AEP (36.57%) / APS (2.18%) / ATSI (0.06%) / BGE (2.72%) / ComEd (0.27%) / Dayton (6.00%) / DEOK (16.17%) / DL (0.23%) / Dominion (21.57%) / DPL (0.62%) / EKPC (7.10%) / JCPL (0.35%) / ME (0.35%) / NEPTUNE* (0.04%) / OVEC (0.12%) / PECO (1.04%) / PENELEC (0.03%) / PEPCO (3.45%) / PPL (0.38%) / PSEG (0.44%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.8	Build a new 500 kV line from Elmont - Kraken (approximately 31 miles). The new line will be constructed primarily of double-circuit 500kV/230 kV monopole structures. The proposed route follows existing 230 kV Line #2032 from Elmont–Hanover–Four Rivers and 230 kV Line #256 from Four Rivers–Kings Dominion–St Johns–Kraken		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (9.85%) / Dominion (77.18%) / PEPCO (12.97%)~~AEC (0.83%) / AEP (0.04%) / APS (4.58%) / ATSI (3.18%) / BGE (7.79%) / ComEd (0.82%) / Dayton (0.01%) / DEOK (0.04%) / DL (1.28%) / Dominion (61.01%) / DPL (1.70%) / EKPC (0.03%) / JCPL (1.13%) / ME (0.96%) / NEPTUNE* (0.13%) / PECO (2.95%) / PENELEC (0.17%) / PEPCO (10.25%) / PPL (1.46%) / PSEG (1.58%) / RE (0.06%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.9	Construct one new 500 kV line terminal position at the existing Elmont substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (9.85%) / Dominion (77.18%) / PEPCO (12.97%)~~AEC (0.83%) / AEP (0.04%) / APS (4.58%) / ATSI (3.18%) / BGE (7.79%) / ComEd (0.82%) / Dayton (0.01%) / DEOK (0.04%) / DL (1.28%) / Dominion (61.01%) / DPL (1.70%) / EKPC (0.03%) / JCPL (1.13%) / ME (0.96%) / NEPTUNE* (0.13%) / PECO (2.95%) / PENELEC (0.17%) / PEPCO (10.25%) / PPL (1.46%) / PSEG (1.58%) / RE (0.06%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.11	Cut and loop Line #5008 into Mosby substation, which will result in two 500 kV lines: Line #5008 Morrisville - Mosby and Line #9573 Mosby - Wishing Star		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (100%)~~AEC (0.94%) / APS (8.02%) / ATSI (1.05%) / BGE (5.97%) / ComEd (0.46%) / DL (0.48%) / Dominion (64.66%) / DPL (1.94%) / JCPL (1.29%) / ME (1.57%) / NEPTUNE* (0.14%) / PECO (3.37%) / PENELEC (0.07%) / PEPCO (5.47%) / PPL (2.70%) / PSEG (1.80%) / RE (0.07%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.12	Install two 500 kV breakers and all associated terminal equipment in the available bay adjacent to existing breaker XT590 to achieve a redundant breaker arrangement. Upgrade existing terminal equipment to 500 kV, 5000A 63 kAIC standards including breaker (XT590), disconnect switches (59078, X74), leads and bus work. Install two 500 kV breakers and all associated terminal equipment in the available bay adjacent to existing breaker 55972 to achieve a redundant breaker arrangement. Upgrade existing terminal equipment to 500 kV, 5000A 63 kAIC standards including breaker (55972), disconnect switches (55975, 55974), leads and bus work		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~APS (15.21%) / Dominion (84.79%)~~AEC (1.38%) / APS (10.36%) / ATSI (4.93%) / BGE (3.30%) / ComEd (0.71%) / DEOK (0.37%) / DL (1.61%) / Dominion (57.74%) / DPL (2.61%) / JCPL (2.34%) / ME (1.99%) / NEPTUNE* (0.26%) / PECO (4.93%) / PENELEC (0.26%) / PEPCO (0.01%) / PPL (3.38%) / PSEG (3.69%) / RE (0.13%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.13	Construct a new 765/500 kV Vontay switching station at the crossing of 500 kV Line #553 Cunningham – Elmont and 765 kV line Joshua Falls – Yeat. Develop two 765 kV line terminal positions and three 500 kV line terminal positions. Install one 765/500 kV transformer, with provisions for a future second transformer		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (100%)~~AEC (0.06%) / AEP (7.23%) / APS (20.84%) / ATSI (37.28%) / BGE (0.26%) / ComEd (0.05%) / Dayton (0.73%) / DEOK (1.40%) / DL (0.63%) / Dominion (1.07%) / DPL (0.02%) / EKPC (0.56%) / JCPL (0.38%) / ME (0.10%) / NEPTUNE* (0.04%) / OVEC (0.02%) / PECO (0.18%) / PENELEC (0.11%) / PEPCO (13.57%) / PPL (14.59%) / PSEG (0.85%) / RE (0.03%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.14	Loop 500 kV Line #553 into the new Vontay substation, which will result in two 500 kV lines: Cunningham – Vontay and Vontay – Elmont		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (4.83%) / Dominion (88.42%) / PEPCO (6.75%)~~AEC (0.15%) / AEP (36.99%) / APS (2.14%) / ATSI (0.02%) / BGE (2.26%) / ComEd (0.92%) / Dayton (1.84%) / DEOK (2.89%) / DL (0.24%) / Dominion (41.30%) / DPL (0.42%) / EKPC (0.30%) / ME (0.16%) / OVEC (0.06%) / PECO (0.55%) / PENELEC (0.83%) / PEPCO (3.15%) / PPL (4.80%) / PSEG (0.95%) / RE (0.03%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.15	Loop 500 kV Line #576 into the new Vontay substation, which will result in two 500 kV lines: from North Anna – Vontay and Vontay – Midlothian		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (9.81%) / Dominion (77.75%) / PEPCO (12.44%)~~AEC (0.29%) / AEP (36.57%) / APS (2.18%) / ATSI (0.06%) / BGE (2.72%) / ComEd (0.27%) / Dayton (6.00%) / DEOK (16.17%) / DL (0.23%) / Dominion (21.57%) / DPL (0.62%) / EKPC (7.10%) / JCPL (0.35%) / ME (0.35%) / NEPTUNE* (0.04%) / OVEC (0.12%) / PECO (1.04%) / PENELEC (0.03%) / PEPCO (3.45%) / PPL (0.38%) / PSEG (0.44%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.16	Loop 765 kV Joshua Falls – Yeat into the new Vontay substation, which will result in two 765 kV lines: from Joshua Falls - Vontay and Vontay - Yeat	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~APS (7.31%) / BGE (9.65%) / Dominion (70.72%) / PEPCO (12.32%)~~AEC (0.74%) / APS (6.75%) / BGE (8.90%) / ComEd (0.64%) / Dominion (65.27%) / DPL (1.76%) / JCPL (0.53%) / ME (0.96%) / NEPTUNE* (0.06%) / PECO (2.70%) / PEPCO (11.37%) / PPL (0.15%) / PSEG (0.16%) / RE (0.01%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.17	Replace equipment on the 500 kV side of Carson substation with 5000A equipment		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (92.95%) / PEPCO (7.05%)~~AEC (0.72%) / AEP (0.88%) / APS (1.90%) / ATSI (5.19%) / BGE (4.01%) / ComEd (1.15%) / Dayton (2.09%) / DEOK (0.30%) / DL (1.75%) / Dominion (60.98%) / DPL (1.32%) / EKPC (6.90%) / JCPL (1.30%) / ME (0.61%) / NEPTUNE* (0.14%) / OVEC (0.03%) / PECO (2.56%) / PENELEC (0.25%) / PEPCO (4.62%) / PPL (1.13%) / PSEG (2.09%) / RE (0.08%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.18	Rebuild approximately 37.4 miles of 500 kV Line #563 from Carson - Midlothian. The proposed structures to be installed are mainly 500/230 kV double-circuit V-string suspension towers. The 230 kV circuit position will be vacant at the completion of this project but serves to accommodate a future 230 kV line	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (92.95%) / PEPCO (7.05%)~~AEC (0.72%) / AEP (0.88%) / APS (1.90%) / ATSI (5.19%) / BGE (4.01%) / ComEd (1.15%) / Dayton (2.09%) / DEOK (0.30%) / DL (1.75%) / Dominion (60.98%) / DPL (1.32%) / EKPC (6.90%) / JCPL (1.30%) / ME (0.61%) / NEPTUNE* (0.14%) / OVEC (0.03%) / PECO (2.56%) / PENELEC (0.25%) / PEPCO (4.62%) / PPL (1.13%) / PSEG (2.09%) / RE (0.08%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.19	Uprate 500 kV Line #563 associated terminal equipment at Carson to 5000A standards		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (92.95%) / PEPCO (7.05%)~~AEC (0.72%) / AEP (0.88%) / APS (1.90%) / ATSI (5.19%) / BGE (4.01%) / ComEd (1.15%) / Dayton (2.09%) / DEOK (0.30%) / DL (1.75%) / Dominion (60.98%) / DPL (1.32%) / EKPC (6.90%) / JCPL (1.30%) / ME (0.61%) / NEPTUNE* (0.14%) / OVEC (0.03%) / PECO (2.56%) / PENELEC (0.25%) / PEPCO (4.62%) / PPL (1.13%) / PSEG (2.09%) / RE (0.08%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.20	Uprate 500 kV Line #563 associated terminal equipment at Midlothian to 5000A standards	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (92.95%) / PEPCO (7.05%)~~AEC (0.72%) / AEP (0.88%) / APS (1.90%) / ATSI (5.19%) / BGE (4.01%) / ComEd (1.15%) / Dayton (2.09%) / DEOK (0.30%) / DL (1.75%) / Dominion (60.98%) / DPL (1.32%) / EKPC (6.90%) / JCPL (1.30%) / ME (0.61%) / NEPTUNE* (0.14%) / OVEC (0.03%) / PECO (2.56%) / PENELEC (0.25%) / PEPCO (4.62%) / PPL (1.13%) / PSEG (2.09%) / RE (0.08%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.21	Uprate 500 kV Line #567 associated terminal equipment at Chickahominy to 5000A standards		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (100%)~~AEC (0.46%) / AEP (29.67%) / APS (1.42%) / ATSI (3.29%) / BGE (2.79%) / ComEd (0.58%) / Dayton (4.87%) / DEOK (0.38%) / DL (1.07%) / Dominion (30.59%) / DPL (0.86%) / EKPC (15.40%) / JCPL (0.81%) / ME (0.42%) / NEPTUNE* (0.09%) / OVEC (0.02%) / PECO (1.63%) / PENELEC (0.16%) / PEPCO (3.33%) / PPL (0.81%) / PSEG (1.30%) / RE (0.05%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.22	Uprate 500 kV Line #567 associated terminal equipment at Surry to 5000A standards	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~Dominion (100%)~~ AEC (0.46%) / AEP (29.67%) / APS (1.42%) / ATSI (3.29%) / BGE (2.79%) / ComEd (0.58%) / Dayton (4.87%) / DEOK (0.38%) / DL (1.07%) / Dominion (30.59%) / DPL (0.86%) / EKPC (15.40%) / JCPL (0.81%) / ME (0.42%) / NEPTUNE* (0.09%) / OVEC (0.02%) / PECO (1.63%) / PENELEC (0.16%) / PEPCO (3.33%) / PPL (0.81%) / PSEG (1.30%) / RE (0.05%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.23	Rebuild approximately 22 miles of 500 kV Line #539 Yeat - Ox using 6000A conductor on double-circuit structures with the option of adding a 230 kV line at a later time		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (10.06%) / Dominion (73.45%) / PEPCO (16.49%)~~AEC (0.44%) / APS (5.71%) / BGE (9.03%) / ComEd (0.30%) / Dominion (65.95%) / DPL (1.29%) / ME (0.19%) / PECO (1.60%) / PEPCO (14.81%) / PSEG (0.66%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.24	Upgrade 500 kV Line #539 associated equipment at Ox substation to support the new conductor rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (10.06%) / Dominion (73.45%) / PEPCO (16.49%)~~AEC (0.44%) / APS (5.71%) / BGE (9.03%) / ComEd (0.30%) / Dominion (65.95%) / DPL (1.29%) / ME (0.19%) / PECO (1.60%) / PEPCO (14.81%) / PSEG (0.66%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.25	Upgrade 500 kV Line #539 associated equipment at Yeat substation to support the new conductor rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (10.06%) / Dominion (73.45%) / PEPCO (16.49%)~~ AEC (0.44%) / APS (5.71%) / BGE (9.03%) / ComEd (0.30%) / Dominion (65.95%) / DPL (1.29%) / ME (0.19%) / PECO (1.60%) / PEPCO (14.81%) / PSEG (0.66%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.26	Rebuild 20 miles of 500 kV Line #576 from Vontay substation to Midlothian substation using 6000A conductor		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~DL (4.46%) / Dominion (85.46%) / PEPCO (10.08%)~~AEC (0.79%) / AEP (0.93%) / APS (1.78%) / ATSI (6.34%) / BGE (4.05%) / ComEd (1.16%) / Dayton (3.25%) / DEOK (0.93%) / DL (2.02%) / Dominion (38.66%) / DPL (1.42%) / EKPC (25.19%) / JCPL (1.48%) / ME (0.59%) / NEPTUNE* (0.16%) / PECO (2.80%) / PENELEC (0.29%) / PEPCO (4.56%) / PPL (1.09%) / PSEG (2.42%) / RE (0.09%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.27	Upgrade/install 6000A equipment at Midlothian substation to support the new conductor termination from Vontay		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~DL (4.46%) / Dominion (85.46%) / PEPCO (10.08%)~~AEC (0.79%) / AEP (0.93%) / APS (1.78%) / ATSI (6.34%) / BGE (4.05%) / ComEd (1.16%) / Dayton (3.25%) / DEOK (0.93%) / DL (2.02%) / Dominion (38.66%) / DPL (1.42%) / EKPC (25.19%) / JCPL (1.48%) / ME (0.59%) / NEPTUNE* (0.16%) / PECO (2.80%) / PENELEC (0.29%) / PEPCO (4.56%) / PPL (1.09%) / PSEG (2.42%) / RE (0.09%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.28	Replace 500 kV circuit breakers (54265 and 553T564) and all associated equipment to Line #553 including switches and CT with 5000A equipment at Cunningham substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (4.83%) / Dominion (88.42%) / PEPCO (6.75%)~~AEC (0.15%) / AEP (36.99%) / APS (2.14%) / ATSI (0.02%) / BGE (2.26%) / ComEd (0.92%) / Dayton (1.84%) / DEOK (2.89%) / DL (0.24%) / Dominion (41.30%) / DPL (0.42%) / EKPC (0.30%) / ME (0.16%) / OVEC (0.06%) / PECO (0.55%) / PENELEC (0.83%) / PEPCO (3.15%) / PPL (4.80%) / PSEG (0.95%) / RE (0.03%)
b4053.30	Replace 230 kV 63 kA breakers 205182, 2051T2063, 221282 with 80 kA breakers at Clifton substation		Dominion (100%)
b4053.31	Replace 500 kV 40 kA breakers H1T559 with 63 kA breakers at Clifton substation		Dominion (100%)
b4053.32	Replace 230 kV 63 kA breakers H592, L292, 203292, 207592, 28392-3, H692, L192 with 80 kA breakers at Elmont substation		Dominion (100%)
b4053.33	Replace 230 kV 63 kA breakers 213732, 226132 with 80 kA breakers at Celestial substation		Dominion (100%)

*Neptune Regional Transmission System, LLC

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%)

American Transmission Systems, Inc. (cont.)

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 138 kV, 69 kV, and 23 kV controls from the generating station building to new control building		ATSI (100%)
b2263	Niles Generation Station – Relocate 138 kV and 23 kV controls from the generation station building to new control building		ATSI (100%)
b2265	Ashtabula Generating Station – Relocate 138 kV controls from the generating station building to new control building		ATSI (100%)
b2284	Increase the design operating temperature on the Cloverdale – Barberton 138 kV line		ATSI (100%)
b2285	Increase the design operating temperature on the Cloverdale – Star 138 kV line		ATSI (100%)
b2301	Reconductor 0.7 miles of 605 ACSR conductor on the Beaver Black River 138 kV 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 138 kV breaker 211-B-63 with 40 kA		ATSI (100%)
b2367	Replace the East Akron 138 kV breaker 36-B-46 with 40 kA		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		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 (100%)
b2459	Install +260/-150 MVAR SVC at Lake Shore		ATSI (100%)
b2492	Replace the Beaver 138 kV breaker '426-B-2' with 63 kA breaker		ATSI (100%)
b2493	Replace the Hoytdale 138 kV breaker '83-B-30' with 63 kA 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%)

American Transmission Systems, Inc. (cont.)

Required Transmission 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 40 kA breaker		ATSI (100%)
b2742	Replace the Hoytdale 138 kV '83-B-26' and '83-B-30' breakers with 63 kA 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%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2869	Replace the Crossland 138 kV breaker "B-16" with a 40 kA 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 954 Kcmil 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%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	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%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3123	At Sammis 345 kV station: Install a new control building in the switchyard, construct a new station access road, install new switchyard power supply to separate from existing generating station power service, separate all communications circuits, and separate all protection and controls schemes		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%)
b3234	Extend both the east and west 138 kV buses at Pine substation, and install one (1) 138 kV breaker, associated disconnect switches, and one (1) 100 MVAR reactor		ATSI (100%)
b3235	Extend 138 kV bus work to the west of Tangy substation for the addition of the 100 MVAR reactor bay and one (1) 138 kV 40 kA circuit breaker		ATSI (100%)
b3236	Extend the Broadview 138 kV bus by adding two (2) new breakers and associated equipment and install a 75 MVAR reactor		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3260	Replace the existing breaker 501-B-251 with a new 69 kV breaker with a higher (40 kA) interrupting capability		ATSI (100%)
b3277	Replace the existing East Akron 138 kV breaker 'B-22' with 3000A continuous, 40 kA momentary current interrupting rating circuit breaker		ATSI (100%)
b3282	Install a second 345/138 kV transformer at Hayes, 448 MVA nameplate rating. Add one 345 kV circuit breaker (3000A) to provide transformer high-side connection between breaker B-18 and the new breaker. Connect the new transformer low side to the 138 kV bus. Add one 138 kV circuit breaker (3000A) at Hayes 138 kV substation between B-42 and the new breaker. Relocate the existing 138 kV No. 1 capacitor bank between B-42 and the new breaker. Protection per First Energy standard		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3678	Expand Galion 138 kV substation, Install 100 MVAR reactor, associated breaker and relaying		ATSI (100%)
b3679	Replace West Fremont 138/69 kV Transformer #2 with a transformer having additional high-side taps		ATSI (100%)
b3680	Replace limiting substation conductors on Ashtabula 138 kV exit to make transmission line conductor the limiting element at Sanborn 138 station		ATSI (100%)
b3713	Disconnect and remove five 138 kV bus tie lines and associated equipment from the Avon Lake Substation to the plant (800-B Bank, 8-AV-T Generator, 5-AV-T, 6-AV-T, and 7-AV-T). Disconnect and remove one 345 kV bus tie line and associated equipment from the Avon substation to the plant (Unit 9). Adjust relay settings at Avon Lake, Avon and Avondale substations. Removal/rerouting of fiber to the plant and install new fiber between the 345 kV and 138 kV yards for the Q4-AV-BUS relaying. Remove SCADA RTU, communications and associated equipment from plant.		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3714	Replace four 345 kV disconnect switches (D74, D92, D93, & D116) with 3000 A disconnect switches at Beaver station. Replace dual 954 45/7 ACSR SCCIR conductors between 5" pipe and WT with new, which meets or exceeds ratings of SN: 1542 MVA, SSTE: 1878 MVA at Beaver station. Replace 3000 SAC TL drop and 3000 SAC SCCIR between 954 ACSR and 5" bus with new, which meets or exceeds ratings of SN: 1542 MVA, SSTE: 1878 MVA at Beaver station. Upgrade BDD relays at breaker B-88 and B-115 at Beaver station. Relay settings changes at Hayes station.		ATSI (100%)
b3720	Rebuild the 69 kV Abbe – Johnson #2 Line (approximately 4.9 miles) with 556 kcmil ACSR conductor. Replace three disconnect switches (A17, D15 & D16) and line drops and revise relay settings at Abbe. Replace one disconnect switch (A159) and line drops and revise relay settings at Johnson. Replace two MOAB disconnect switches (A4 & A5), one disconnect switch (D9), and line drops at Redman		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3721	Rebuild and reconductor the Avery – Hayes 138 kV line (approximately 6.5 miles) with 795 kcmil 26/7 ACSR		ATSI (100%)
b3777	Disconnect and remove three 345 kV breakers, foundations and associated equipment from Sammis 345 kV substation. Remove nine 345 kV Capacitor voltage transformers. Remove two 345 kV disconnect switches. Install new 345 kV bus work and foundations. Install new fencing. Remove and adjust relaying at Sammis 345 kV substation		ATSI (100%)
b3789.0	A 69 kV, 60 MVAR shunt reactor will be installed at the Salt Springs substation. The reactor terminal will be connected to the existing 69 kV bus, and an independent-pole operation, 1200A circuit breaker will be installed for reactor switching		ATSI (100%)
b3925.1	Rebuild the 7.46 miles of Avery - Shinrock 138 kV Line with 795 kcmil 26/7 ACSS (7.46 miles)		ATSI (100%)
b3925.2	Rebuild the 13.45 miles of Greenfield - Lakeview 138 kV Line from 2 x 336.4 kcmil 26/7 ACSR to 1 x 795 kcmil 26/7 ACSS		ATSI (100%)
b3925.3	Rebuild the 6.5 miles of Avery-Hayes 138 kV Line with 795 kcmil 26/7 ACSS conductor		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3925.4	Rebuild the Greenfield - Beaver 138 kV corridor (32 miles) with 795 kcmil 26/7 ACSS. This corridor encompasses multiple 138 kV lines that are constructed on common towers		ATSI (100%)
b3978.1	Reconductor one span of transmission line outside Ottawa substation. Reconductor one span of transmission line outside Lakeview substation.		ATSI (100%)
b3978.2	Replace limiting terminal equipment at Lakeview substation: Two thermal relays, Two 138 kV disconnect switches, Limiting substation conductor.		ATSI (100%)
b3979.1	Abbe - Johnson No.1 69 kV line (Johnson - Elyria Water P.C.): Reconductor one span of transmission line between Johnson Substation and Elyria Water P.C. Replace one 69 kV disconnect switch. Upgrade one thermal relay. Modify Elyria Loop Tap configuration. Install one 69 kV disconnect switch.		ATSI (100%)
b3979.2	Abbe - Johnson No.1 69 kV line (Elyria Water P.C. - Spring Valley): Replace one 69 kV disconnect switch.		ATSI (100%)
b3979.3	Abbe - Johnson No.1 69 kV line (Spring Valley - Lorain College): Replace two 69 kV disconnect switches.		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3980.1	Bellevue-Groton 69 kV line: Rebuild 4 miles of the Bellevue - Groton 69 kV line		ATSI (100%)
b3980.2	Bellevue substation: Replace three 69 kV disconnect switches. Revise relay settings. Replace limiting substation conductor.		ATSI (100%)
b3980.3	Groton substation: Revise relay settings.		ATSI (100%)
b3984.1	Replace 69 kV circuit breakers: 501-B-24, 501-B-272, and 501-B-274		ATSI (100%)
b3985.2	Eastlake substation - Replace 12 breakers with 80 kA, 3000 A circuit breakers. This will not affect the existing line ratings at the station.		ATSI (100%)
b3985.3	Hoytdale substation – Replace 83-B-14, 83-B-18, 83-B-22 breakers with 63 kA, 3000A circuit breakers. This will not affect the Hoytdale-New Castle line ratings, which are currently rated at 435/500 SN/SE for circuit Z104 and 329/413 SN/SE for circuit Z110.		ATSI (100%)
b3985.4	Johnson substation - Replace 451-B-163 breaker with a 63 kA, 3000 A circuit breaker.		ATSI (100%)
b4041.1	2024W1 P5: Install battery monitoring, DC panel, line panel, and modify relay wiring: Addressing FG No. 2024-P5-ATSI15.		ATSI (100%)
b4050.1	2024W1 P5: Modify relay wiring: Addressing FG No. 2024-P5-ATSI05.		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4051.1	2024W1 P5: Install open battery monitoring and modify relay wiring: Addressing FG No. 2024-P5-ATSI09.		ATSI (100%)
b4068.5	Teddy 765/345 kV substation scope: Construct a new 765/345 kV greenfield substation interconnecting the new 765 kV Marysville line and the new 765 kV Greentown line with three 100 MVAR single-phase reactors on each 765 kV line. Install nine 765 kV circuit breakers. Install two 765/345 kV, 2250 MVA transformers. Install nine 345 kV circuit breakers.		AEC (0.08%) / AEP (70.91%) / ATSI (4.64%) / BGE (0.64%) / Dayton (9.40%) / DEOK (7.68%) / DL (0.70%) / Dominion (4.53%) / DPL (0.20%) / JCPL (0.03%) / ME (0.05%) / OVEC (0.07%) / PECO (0.34%) / PENELEC (0.01%) / PEPCO (0.64%) / PSEG (0.08%)~~AEP (83.47%) / ATSI (5.46%) / Dayton (11.07%)~~
b4068.6	Teddy 765/345 kV substation: Install two 345 kV capacitor banks at Teddy substation.		ATSI (100%)
b4068.46	East Springfield - London structures: Lower the existing First Energy East Springfield 138 kV line between structures 29 and 30 on the proposed Teddy - Beatty 345 kV line.		AEC (0.18%) / AEP (38.02%) / ATSI (51.32%) / BGE (0.15%) / ComEd (0.25%) / DL (1.11%) / Dominion (6.59%) / DPL (0.28%) / JCPL (0.50%) / NEPTUNE* (0.05%) / PECO (0.73%) / PSEG (0.79%) / RE (0.03%)~~ATSI (100%)~~

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(24) Duke Energy Ohio and Duke Energy Kentucky

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2278	Revising the reclosing of Charles 138 kV breaker '919' to 15 sec		DEOK (100%)
b2451	Replace the Charles 138 kV breaker '919' with 63 kA		DEOK (100%)
b2564	Add two breakers at Miami Fort 138 kV; Interim solution to violation driven by Beckjord GTs deactivations is to lower generation at Miami Fort to 120 MW		DEOK (100%)
b2634	Convert Miami Fort 345 kV substation to a ring bus terminating Feeder 4504, TB 9 and TB 10 in separate ring positions		DEOK (100%)
b2828	Install 5% reactors at Miami Fort 138 kV to limit current		DEOK (100%)
b2829	Reconductor feeder from Port Union to East Provident 138 kV line for 300 MVA		DEOK (100%)
b2830	Expand Garver 345 kV substation to include 138 kV. Install 1-345 kV breaker, 1-345/138 kV 400 MVA transformer, 6-138 kV Breakers and bus work. Connect local 138 kV circuits from Todhunter, Rockies Express, and Union		DEOK (100%)
b2831.2	Upgrade the Tanner Creek - Miami Fort 345 kV circuit (DEOK portion)		**DFAX Allocation:** Dayton (51.51%) / DEOK (48.49%)
b2894	Replace Todhunter 138 kV breakers '931', '919', and '913' with 80 kA breakers		DEOK (100%)

Duke Energy Ohio and Duke Energy Kentucky (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2895	Replace Dicks Creek 138 kV breaker '963' with 63 kA breaker		DEOK (100%)
b2901	Reconductor the Port Union – Mulhauser 138 kV line with 954 ASCR bringing the summer ratings to A/B/C=300/300/300 MVA		DEOK (100%)
b2977	Portion of 2017_1-6A		DEOK (100%)
b2977.1	Install a new 345 kV breaker "1422" so Pierce 345/138 kV transformer #18 is now fed in a double breaker, double bus configuration		DEOK (100%)
b2977.2	Remove X-533 No. 2 to the first tower outside the station. Install a new first tower for X-533 No. 2		DEOK (100%)
b2977.3	Install a new 345 kV breaker B and move the Buffington – Pierce 345 kV feeder to the B-C junction. Install a new tower at the first tower outside the station for Buffington – Pierce 345 kV line		DEOK (100%)
b2977.4	Remove breaker A and move the Pierce 345/138 kV transformer #17 feed to the C-D junction		DEOK (100%)
b2977.5	Replace breaker 822 at Beckjord 138 kV substation to increase the rating from Pierce to Beckjord 138 kV to 603 MVA		DEOK (100%)
b3048	Replace 138 kV breakers 937, 941 and 945 at Todhunter station		DEOK (100%)
b3050	Install redundant relay to Port Union 138 kV Bus #2		DEOK (100%)

Duke Energy Ohio and Duke Energy Kentucky (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3334	Rebuild the section of Miami Fort - Hebron Tab 138 kV line		DEOK (100%)
b3940.1	The 345 kV ring bus at Woodsdale substation will be reconfigured into a 345 kV breaker-and-half yard to improve substation reliability. Additionally, all 2000A equipment at Woodsdale substation will be upgraded to 3000A to increase substation capacity. Currently two DEOK supplemental projects that are planned at Woodsdale substation: s3447.1 and s3601.1. DEOK will convert all s3447.1 and parts of s3601.1 to address these reliability violations.		DEOK (100%)
b3944.1	Rebuild the McGuffey to Locust 69 kV line (~1.35 miles) with 954 ACSR rail conductor and OPGW. The 54 wood poles will be replaced with light duty, steel poles. The rebuild will take place in the existing right-of-way, and the distribution underbuilds will also be restored. Conductor drops going into McGuffey and Locust substations will be replaced with 954 AAC conductor.		DEOK (100%)

Duke Energy Ohio and Duke Energy Kentucky (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4003.1	Rebuild the College Corner (AEP)-Collinsville (DEOK) 138 kV circuit from the OH/IN state line (tower 10P-X1-129) to Collinsville substation. AEP owns approximately 0.1 miles of the line from College Corner substation to the OH/IN state line. DEOK owns the remaining 11.90 miles from the state line to Collinsville substation. The entire 11.90 miles section that DEOK owns will be rebuilt with 954ACSS/TW conductor (@ 200C) and new double-circuit structures. The College Corner (AEP)-Trenton (DEOK) line is on the other side of the double-circuit structure and will also be rebuilt. DEOK will be doing a route survey to see if easement updates and/or additional structures are required.		AEC (0.12%) / BGE (1.23%) / DEOK (88.39%) / DL (0.41%) / Dominion (6.64%) / DPL (0.33%) / JCPL (0.04%) / ME (0.25%) / OVEC (0.25%) / PECO (0.49%) / PENELEC (0.04%) / PEPCO (1.39%) / PPL (0.42%)~~DEOK (100%)~~

Duke Energy Ohio and Duke Energy Kentucky (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4003.2	Rebuild parts of the College Corner (AEP)-Trenton (DEOK) 138 kV circuit that shares a common structure with the College Corner (AEP)-Collinsville (DEOK) circuit from the OH/IN state line (Tower 10P-X1-129) to Collinsville substation. AEP owns approximately 0.1 miles of the line from College Corner substation to the OH/IN state line. DEOK owns the remaining 24.19 miles from the state line to Trenton substation. Only the 11.90-mile DEOK section that shares a common structure with College Corner (AEP)-Collinsville (DEOK) will be rebuilt with 954ACSS/TW conductor (@ 200C) and new double-circuit structures. The remaining sections from Collinsville-Trenton will be left untouched. DEOK will be doing a route survey to see if easement updates and/or additional structures are required.		AEC (0.23%) / AEP (6.60%) / ATSI (8.06%) / BGE (0.88%) / ComEd (0.32%) / Dayton (70.97%) / DL (1.32%) / Dominion (8.83%) / DPL (0.41%) / JCPL (0.36%) / NEPTUNE* (0.04%) / PECO (0.92%) / PEPCO (0.72%) / PSEG (0.33%) / RE (0.01%)~~Dayton (100%)~~

*Neptune Regional Transmission System, LLC

Duke Energy Ohio and Duke Energy Kentucky (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4003.4	Update relay settings for the College Corner - Collinsville line at DEOK's Collinsville substation.		AEC (0.12%) / BGE (1.23%) / DEOK (88.39%) / DL (0.41%) / Dominion (6.64%) / DPL (0.33%) / JCPL (0.04%) / ME (0.25%) / OVEC (0.25%) / PECO (0.49%) / PENELEC (0.04%) / PEPCO (1.39%) / PPL (0.42%)~~DEOK (100%)~~
b4003.5	Update relay settings for the College Corner - Trenton line at DEOK's Trenton substation.		AEC (0.23%) / AEP (6.60%) / ATSI (8.06%) / BGE (0.88%) / ComEd (0.32%) / Dayton (70.97%) / DL (1.32%) / Dominion (8.83%) / DPL (0.41%) / JCPL (0.36%) / NEPTUNE* (0.04%) / PECO (0.92%) / PEPCO (0.72%) / PSEG (0.33%) / RE (0.01%)~~(Dayton 100%)~~

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(32) NextEra Energy Transmission LLC

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3775.1	Outside of the Green Acres substation, swap the NIPSCO Green Acre Tap towers from the St. John – Green Acres – Olive 345 kV line to the University Park N – Olive 345 kV line to create University Park N – Green Acres – Olive and St. John – Olive 345 kV lines		**Reliability Driver:** ComEd (54.45%) / Dayton (45.55%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)
b3775.2	Reconductor NextEra Energy's (NEET's) section of Crete (IN/IL border) – St. John 345 kV line (6.95 miles)		**Reliability Driver:** ComEd (100%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

*Neptune Regional Transmission System, LLC
**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

SCHEDULE 12 – APPENDIX A

(32) NextEra Energy Transmission LLC

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3775.8	Upgrade the existing terminal equipment (substation conductor) at St. John on the existing Crete to St. John 345 kV line with bundled 2x1590 ACSR Lapwing		**Reliability Driver:** ComEd (62.41%) / Dayton (37.59%)
			Market Efficiency Driver: AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)
b3775.9	Upgrade the existing terminal equipment (substation conductor) at Green Acres on the existing St. John to Green Acres 345 kV line with bundled 2x1590 ACSR Lapwing		**Reliability Driver:** ComEd (54.45%) / Dayton (45.55%)
			Market Efficiency Driver: AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

*Neptune Regional Transmission System, LLC
**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.102	New 500 kV line from existing 502 Junction substation to Woodside 500 kV substation (bypass Black Oak) (NEET Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (25.59%) / BGE (9.79%) / Dominion (51.94%) / PEPCO (12.68%)

*Neptune Regional Transmission System, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.106	Woodside 500 kV substation, except terminations, transformer, Cap Banks and Static Synchronous Compensator (STATCOM)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (100%)
b3800.107	Line Termination work at Woodside 500 kV substation for 502 Junction to Woodside 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (25.59%) / BGE (9.79%) / Dominion (51.94%) / PEPCO (12.68%)

*Neptune Regional Transmission System, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.108	Line termination work at Woodside 500 kV substation for Woodside to Aspen 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.18%) / BGE (7.21%) / Dominion (72.52%) / PEPCO (11.09%)
b3800.109	Termination work for two 500/138 kV transformers at Woodside 500 kV substation		APS (100%)
b3800.110	Two 500/138 kV transformers at Woodside 500 kV substation		APS (100%)

*Neptune Regional Transmission System, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.113	Two 150 MVAR Cap banks and one +500/-300 MVAR STATCOM at Woodside 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (100%)
b3800.115	Line work for terminating Doubs to Bismark line for Doubs side at Woodside 500 kV substation (NEET Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (27.49%) / BGE (9.83%) / Dominion (53.78%) / PEPCO (8.90%)

*Neptune Regional Transmission System, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.117	Line work for terminating Doubs to Bismark line for Bismark side for Woodside 500 kV substation (NEET Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (21.09%) / BGE (6.55%) / Dominion (64.94%) / PEPCO (7.42%)
b3800.119	New 500kV transmission line from Woodside substation to Aspen substation (in DOM zone) (NEET Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.18%) / BGE (7.21%) / Dominion (72.52%) / PEPCO (11.09%)

*Neptune Regional Transmission System, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.14	Install two new 500 kV dead-end structures near Black Oak substation to interconnect the 502 Junction – Woodside 500 kV transmission line. Adjust Woodside protection scheme for Black Oak loop-in and remove 502 Junction tie. (NEET Scope)		APS (100%)
b4036.16	Install two new 500 kV circuit breaker at North and South bus to terminate the 765-500 kV transformers leads. Upgrade protection settings at Juniata (NextEra Work).		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (23.801%) / APS (101.7860%) / Dominion (7.01%) / DPL (2.6547%) / JCPL (109.4572%) / ME (45.9835%) / NeptuneNEPTUNE* (1.1306%) / PECO (110.353%) / PEPCO (45.181%) / PPL (2931.9975%) / PSEG (165.5370%) / RE (0.561%)

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(33) Keystone Appalachian Transmission Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2120	Six-Wire Lake Lynn - Lardin 138 kV circuits		APS (100%)
b2174.8	Replace relays at Mitchell substation		APS (100%)
b2174.9	Replace primary relay at Piney Fork substation		APS (100%)
b2174.10	Perform relay setting changes at Bethel Park substation		APS (100%)
b2213	Armstrong Substation: Relocate 138 kV controls from the generating station building to new control building		APS (100%)
b2300	Reconductor from Lake Lynn - West Run 138 kV		APS (100%)
b2341	Install 39.6 MVAR Capacitor at Shaffers Corner 138 kV Substation		APS (100%)
b2362	Install a 250 MVAR SVC at Squab Hollow 230 kV		APS (100%)
b2362.1	Install a 230 kV breaker at Squab Hollow 230 kV substation		APS (100%)
b2363	Convert the Shingletown 230 kV bus into a 6 breaker ring bus		APS (100%)
b2364	Install a new 230/138 kV transformer at Squab Hollow 230 kV substation. Loop the Forest - Elko 230 kV line into Squab Hollow. Loop the Brookville - Elko 138 kV line into Squab Hollow		APS (100%)
b2412	Install a 44 MVAR 138 kV capacitor at the Hempfield 138 kV substation		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2440	Replace the Cabot 138kV breaker 'C9-KISKI VLY' with 63kA		APS (100%)
b2546	Install a 51.8 MVAR (rated) 138 kV capacitor at Nyswaner 138 kV substation		APS (100%)
b2547.1	Construct a new 138 kV six breaker ring bus Hillman substation		APS (100%)
b2547.2	Loop Smith- Imperial 138 kV line into the new Hillman substation		APS (100%)
b2547.3	Install +125/-75 MVAR SVC at Hillman substation		APS (100%)
b2547.4	Install two 31.7 MVAR 138 kV capacitors		APS (100%)
b2548	Eliminate clearance de-rate on Wylie Ridge – Smith 138 kV line and upgrade terminals at Smith 138 kV, new line ratings 294 MVA (Rate A)/350 MVA (Rate B)		APS (100%)
b2612.1	Relocate All Dam 6 138 kV line and the 138 kV line to AE units 1&2		APS (100%)
b2612.2	Install 138 kV, 3000A bus-tie breaker in the open bus-tie position next to the Shaffers corner 138 kV line		APS (100%)
b2612.3	Install a 6-pole manual switch, foundation, control cable, and all associated facilities		APS (100%)
b2666	Yukon 138 kV Breaker Replacement		APS (100%)
b2666.1	Replace Yukon 138 kV breaker “Y-11(CHARL1)” with an 80 kA breaker		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2666.2	Replace Yukon 138 kV breaker "Y-13(BETHEL)" with an 80 kA breaker		APS (100%)
b2666.3	Replace Yukon 138 kV breaker "Y-18(CHARL2)" with an 80 kA breaker		APS (100%)
b2666.4	Replace Yukon 138 kV breaker "Y-19(CHARL2)" with an 80 kA breaker		APS (100%)
b2666.5	Replace Yukon 138 kV breaker "Y-4(4B-2BUS)" with an 80 kA breaker		APS (100%)
b2666.6	Replace Yukon 138 kV breaker "Y-5(LAYTON)" with an 80 kA breaker		APS (100%)
b2666.7	Replace Yukon 138 kV breaker "Y-8(HUNTING)" with an 80 kA breaker		APS (100%)
b2666.8	Replace Yukon 138 kV breaker "Y-9(SPRINGD)" with an 80 kA breaker		APS (100%)
b2666.9	Replace Yukon 138 kV breaker "Y-10(CHRL-SP)" with an 80 kA breaker		APS (100%)
b2666.10	Replace Yukon 138 kV breaker "Y-12(1-1BUS)" with an 80 kA breaker		APS (100%)
b2666.11	Replace Yukon 138 kV breaker "Y-14(4-1BUS)" with an 80 kA breaker		APS (100%)
b2666.12	Replace Yukon 138 kV breaker "Y-2(1B-BETHE)" with an 80 kA breaker		APS (100%)
b2666.13	Replace Yukon 138 kV breaker "Y-21(SHEPJ)" with an 80 kA breaker		APS (100%)
b2666.14	Replace Yukon 138 kV breaker "Y-22(SHEPHJT)" with an 80 kA breaker		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2689.3	Upgrade terminal equipment at structure 27A		APS (100%)
b2696	Upgrade 138 kV substation equipment at Butler, Shanor Manor and Krendale substations. New rating of line will be 353 MVA summer normal/422 MVA emergency		APS (100%)
b2763	Replace the breaker risers and wave trap at Bredinville 138 kV substation on the Cabrey Junction 138 kV terminal		APS (100%)
b2965	Reconductor the Charleroi – Allenport 138 kV line with 954 ACSR conductor. Replace breaker risers at Charleroi and Allenport		APS (33.72%) / DL (66.28%)
b2966	Reconductor the Yukon – Smithton – Shepler Hill Jct 138 kV line with 795 ACSS conductor. Replace Line Disconnect Switch at Yukon		APS (100%)
b2966.1	Reconductor the Yukon - Smithton - Shepler Hill Jct 138 kV line and replace terminal equipment as necessary to achieve required rating		APS (100%)
b2967	Convert the existing 6 wire Butler - Shanor Manor - Krendale 138 kV line into two separate 138 kV lines. New lines will be Butler - Keisters and Butler - Shanor Manor - Krendale 138 kV		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3005	Reconductor 3.1 mile 556 ACSR portion of Cabot to Butler 138 kV with 556 ACSS and upgrade terminal equipment. 3.1 miles of line will be reconductored for this project. The total length of the line is 7.75 miles		APS (100%)
b3006	Replace four Yukon 500/138 kV transformers with three transformers with higher rating and reconfigure 500 kV bus		APS (60.47%) / DL (39.53%)
b3007.1	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 ACSS replacing the existing 636 ACSR conductor. At Social Hall, meters, relays, bus conductor, a wave trap, circuit breaker and disconnects will be replaced		APS (100%)
b3010	Replace terminal equipment at Keystone and Cabot 500 kV buses. At Keystone, bus tubing and conductor, a wave trap, and meter will be replaced. At Cabot, a wave trap and bus conductor will be replaced		APS (100%)
b3011.1	Construct new Route 51 substation and connect 10 138 kV lines to new substation		DL (100%)
b3011.2	Upgrade terminal equipment at Yukon to increase rating on Yukon to Charleroi #2 138 kV line (New Yukon to Route 51 #4 138 kV line)		APS (8.19%) / DL (91.81%)
b3011.3	Upgrade terminal equipment at Yukon to increase rating on Yukon to Route 51 #1 138 kV line		DL (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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		APS (8.19%) / DL (91.81%)
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%)
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%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3064.3	Upgrade line relaying at Piney Fork and Bethel Park for Piney Fork – Elrama 138 kV line and Bethel Park – Elrama 138 kV		APS (100%)
b3068	Reconductor the Yukon – Westraver 138 kV line (2.8 miles), replace the line drops and relays at Yukon 138 kV and replace switches at Westraver 138 kV bus		APS (100%)
b3069	Reconductor the Westraver – Route 51 138 kV line (5.63 miles) and replace line switches at Westraver 138 kV bus		APS (100%)
b3070	Reconductor the Yukon – Route 51 #1 138 kV line (8 miles), replace the line drops, relays and line disconnect switch at Yukon 138 kV bus		APS (100%)
b3071	Reconductor the Yukon – Route 51 #2 138 kV line (8 miles) and replace relays at Yukon 138 kV bus		APS (100%)
b3072	Reconductor the Yukon – Route 51 #3 138 kV line (8 miles) and replace relays at Yukon 138 kV bus		APS (100%)
b3074	Reconductor the 138 kV bus at Armstrong substation		APS (100%)
b3075	Replace the 500/138 kV transformer breaker and reconductor 138 kV bus at Cabot substation		APS (100%)
b3076	Reconductor the Edgewater – Loyalhanna 138 kV line (0.67 mile)		APS (100%)
b3083	Reconductor the 138 kV bus at Butler and reconductor the 138 kV bus and replace line trap at Karns City		APS (100%)
b3214.1	Reconductor the Yukon – Smithton – Shepler Hill Jct 138 kV Line. Upgrade terminal equipment at Yukon and replace line relaying at Mitchell and Charleroi		APS (5.95%) / DL (94.05%)
b3214.2	Reconductor the Smithton – Shepler Hill Jct 138 kV Line		APS (8.38%) / DL (91.62%)
b3230	At Enon substation install a second 138 kV, 28.8 MVAR nameplate, capacitor and the associated 138 kV capacitor switcher		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3318	Reconductor the Shanor Manor - Butler 138 kV line with an upgraded circuit breaker at Butler 138 kV station		APS (100%)
b3325	Reconductor the Charleroi - Union 138 kV line and upgrade terminal equipment at Charleroi 138 kV station		APS (100%)
b3681	Upgrade the Shingletown #82 230/46 kV Transformer circuit by installing a 230 kV breaker and disconnect switches, removing existing 230 kV switches, replacing 46 kV disconnect switches, replacing limiting substation conductor, and installing/replacing relays		APS (100%)
b3710	Reconductor AA2-161 to Yukon 138 kV Lines #1 and #2 with 954 ACSS conductor		APS (100%)
b3738	Replace limiting terminal equipment on Charleroi – Dry Run 138 kV line		APS (100%)
b3739	Replace limiting terminal equipment on Dry Run – Mitchell 138 kV line		APS (100%)
b3740	Replace limiting terminal equipment on Glen Falls –Bridgeport 138 kV line		APS (100%)
b3741	Replace limiting terminal equipment on Yukon - Charleroi #1 138 kV line		APS (100%)
b3742	Replace limiting terminal equipment on Yukon - Charleroi #2 138 kV line		APS (100%)
b3744	Replace one span of 1272 ACSR from Krendale substation to structure 35 (approximately 630 feet) Replace one span of 1272 ACSR from Shanor Manor to structure 21 (approximately 148 feet) Replace 1272 ACSR risers at Krendale and Shanor Manor substations Replace 1272 ACSR substation conductor at Krendale substation Replace relaying at Krendale substation Revise relay settings at Butler and Shanor Manor substations		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3745	Install redundant relaying at Carbon Center 230 kV substation		APS (100%)
b3761	Install 138 kV breaker on the Ridgway 138/46 kV #2 Transformer		APS (100%)
b3773	Install 33 MVAR switched capacitor, 138 kV breaker, and associated relaying at McConnellsburg 138 kV substation		APS (100%)
b3870.1	At Federal Street Substation: - Install (3) 138 kV CCVTs on the 138 kV bus. - Remove the Transformer 1 CO-6 138 kV Phase relay overcurrent relays. - Install (1) SEL-421 relay on the high side of Transformer 1. - Install foundations, conduit, and grounding for new CCVTs. - Install cables between CCVTs and relay.		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4036.2	Upgrade South Bend terminal of Keystone - South Bend 500 kV line.	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / Neptune* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.04%) / AEP (0.36%) / APS (2.13%) / ATSI (11.52%) / BGE (12.47%) / ComEd (0.99%) / Dayton (0.21%) / DEOK (0.32%) / DL (0.42%) / Dominion (2.48%) / DPL (4.33%) / EKPC (0.08%) / JCPL (6.39%) / ME (1.27%) / NEPTUNE* (0.68%) / PECO (0.12%) / PENELEC (1.05%) / PEPCO (0.26%) / PPL (43.08%) / PSEG (11.38%) / RE (0.42%)~~APS (5.36%) / DL (1.06%) / PPL (93.58%)~~

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(34) Valley Link Transmission Co., LLC

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.2	Construct a new 175 miles Amos – Welton Spring 765 kV line (AEP Section of the line is 30 miles)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)
b4000.3	Construct a new 175 miles Amos – Welton Spring 765 kV line (APS/FE Section of the line is 145 miles)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.4	Construct a new 765 kV switchyard (Welton Spring)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)
b4000.5	Install four 250 MVAR shunt capacitors, and a +/-500 MVAR STATCOM at Welton Spring 765 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (100%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.6	Construct a new 86 miles Welton Spring to Rocky Point 765 kV line (Welton Spring to DVP local area, roughly 21 miles) (VA Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)
b4000.7	Construct a new 86 miles Welton Spring to Rocky Point 765 kV line (in DVP local area/Millville to Lovettsville section, roughly 10.5 miles)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.8	Construct a new 86 miles Welton Spring to Rocky Point 765 kV line (DVP local area to Rocky Point, roughly 4.8 miles)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)
b4000.9	Construct a new substation called Rocky Point with a 765 kV and a 500 kV yard. Loop in the Doubs-Goose Creek 500 kV line, the Doubs-Aspen 500 kV line, and the Woodside-Goose Creek 500 kV line. Install two 765/500 kV transformer at Rocky Point substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.99%) / BGE (8.29%) / Dominion (67.55%) / PEPCO (9.17%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.10	Install four 250 MVAR cap banks (two on 765 and two on 500 kV side) and a +/-500 MVAR STATCOM on the 765 kV Rocky Point yard		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (100%)
b4000.15	Construct a new 86 miles Welton Spring to Rocky Point 765 kV line (Welton Spring to DVP local area, roughly 50 miles) (WV Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)
b4000.346	Cut-in 500 kV line from Kraken substation into Yeat substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.348	Build a new 500/230kV substation called Kraken. The 500 kV, 5000A ring bus will be set up for a redundant breaker configuration. Install (2) 1400MVA 500/230 kV transformers. A new redundant breaker ring will be added at Kraken to accommodate the new 500 kV line from North Anna to Kraken		Dominion (100%)
b4000.355	Build a new 156 mile 765 kV line from Joshua Falls – Yeat (roughly 69.3 miles in AEP section)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** APS (9.11%) / BGE (6.49%) / Dominion (75.72%) / PEPCO (8.68%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.356	Build a new 156 mile 765 kV line from Joshua Falls – Yeat (roughly 86.7 miles in Dominion section)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** APS (9.11%) / BGE (6.49%) / Dominion (75.72%) / PEPCO (8.68%)
b4000.357	Build a new 765/500/230 kV substation called Yeat. Install (2) 765/500 kV transformers. Cut in 500 kV line Bristers – Ox and 500 kV line Meadowbrook – Vint Hill into Yeat		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** Dominion (89.71%) / PEPCO (10.29%)
b4000.358	Build a new 765/500/230 kV substation called Yeat. Install (1) 500/230 kV transformer. Cut in 230 kV line Vint Hill – Elk Run into Yeat substation		Dominion (100%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4052.5	Rocky Point 500 kV remote work for Dickerson (new 500 kV) - Rocky Point line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (1.64%) / Dominion (83.16%) / PEPCO (14.87%) / PPL (0.33%)~~APS (1.65%) / Dominion (83.43%) / PEPCO (14.92%)~~
b4053.10	Construct one new 500 kV line terminal position at the proposed Kraken substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~BGE (9.85%) / Dominion (77.18%) / PEPCO (12.97%)~~AEC (0.83%) / AEP (0.04%) / APS (4.58%) / ATSI (3.18%) / BGE (7.79%) / ComEd (0.82%) / Dayton (0.01%) / DEOK (0.04%) / DL (1.28%) / Dominion (61.01%) / DPL (1.70%) / EKPC (0.03%) / JCPL (1.13%) / ME (0.96%) / NEPTUNE* (0.13%) / PECO (2.95%) / PENELEC (0.17%) / PEPCO (10.25%) / PPL (1.46%) / PSEG (1.58%) / RE (0.06%)

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(36) Kammer Juniata Transmission, LLC

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)	
b4036.8	Construct a new single-circuit 765 kV transmission line between Kammer and proposed Buttermilk Falls substations. (AEP Zone). The total length of the line is 114 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.33%) / AEP (2.07%) / APS (16.49%) / ATSI (13.74%) / BGE (1.06%) / ComEd (0.04%) / Dayton (0.46%) / DEOK (0.60%) / Dominion (17.28%) / DPL (1.94%) / EKPC (0.16%) / JCPL (8.19%) / ME (0.25%) / NEPTUNE* (0.88%) / OVEC (0.01%) / PECO (8.84%) / PENELEC (0.01%) / PEPCO (10.67%) / PPL (1.93%) / PSEG (12.59%) / RE (0.46%)~~AEC (2.99%) / AEP (2.09%) / APS (21.19%) / ATSI (17.66%) / BGE (1.07%) / Dayton (0.47%) / DEOK (0.61%) / EKPC (0.16%) / JCPL (10.52%) / ME (0.26%) / NEPTUNE* (1.14%) / PECO (11.36%) / PEPCO (13.71%) / PSEG (16.18%) / RE (0.59%)~~

*Neptune Regional Transmission System, LLC

(36) Kammer Juniata Transmission, LLC (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)	
b4036.9	Construct a new single-circuit 765 kV transmission line between Kammer and proposed Buttermilk Falls substations. (APS Zone). The total length of the line is 114 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.33%) / AEP (2.07%) / APS (16.49%) / ATSI (13.74%) / BGE (1.06%) / ComEd (0.04%) / Dayton (0.46%) / DEOK (0.60%) / Dominion (17.28%) / DPL (1.94%) / EKPC (0.16%) / JCPL (8.19%) / ME (0.25%) / NEPTUNE* (0.88%) / OVEC (0.01%) / PECO (8.84%) / PENELEC (0.01%) / PEPCO (10.67%) / PPL (1.93%) / PSEG (12.59%) / RE (0.46%)~~AEC (2.99%) / AEP (2.09%) / APS (21.19%) / ATSI (17.66%) / BGE (1.07%) / Dayton (0.47%) / DEOK (0.61%) / EKPC (0.16%) / JCPL (10.52%) / ME (0.26%) / NEPTUNE* (1.14%) / PECO (11.36%) / PEPCO (13.71%) / PSEG (16.18%) / RE (0.59%)~~

*Neptune Regional Transmission System, LLC

Kammer Juniata Transmission, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.10	Construct a new single-circuit 765 kV transmission line between Kammer and proposed Buttermilk Falls substations. (PENELEC Zone). The total length of the line is 114 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.33%) / AEP (2.07%) / APS (16.49%) / ATSI (13.74%) / BGE (1.06%) / ComEd (0.04%) / Dayton (0.46%) / DEOK (0.60%) / Dominion (17.28%) / DPL (1.94%) / EKPC (0.16%) / JCPL (8.19%) / ME (0.25%) / NEPTUNE* (0.88%) / OVEC (0.01%) / PECO (8.84%) / PENELEC (0.01%) / PEPCO (10.67%) / PPL (1.93%) / PSEG (12.59%) / RE (0.46%)~~AEC (2.99%) / AEP (2.09%) / APS (21.19%) / ATSI (17.66%) / BGE (1.07%) / Dayton (0.47%) / DEOK (0.61%) / EKPC (0.16%) / JCPL (10.52%) / ME (0.26%) / NEPTUNE* (1.14%) / PECO (11.36%) / PEPCO (13.71%) / PSEG (16.18%) / RE (0.59%)~~
b4036.11	Construct a new single-circuit 765 kV transmission line between proposed Buttermilk Falls and proposed Mountain Stone substations. (PENELEC Zone). The total length of the line is 108 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) /

			ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)~~AEC (3.01%) / APS (11.60%) / DPL (2.65%) / JCPL (10.45%) / ME (5.35%) / NEPTUNE* (1.13%) / PECO (11.33%) / PEPCO (5.18%) / PPL (31.99%) / PSEG (16.70%) / RE (0.61%)~~

*Neptune Regional Transmission System, LLC

Kammer Juniata Transmission, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.12	Construct a new single-circuit 765 kV transmission line between proposed Buttermilk Falls and proposed Mountain Stone substations. (PPL Zone). The total length of the line is 108 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)~~AEC (3.01%) / APS (11.60%) / DPL (2.65%) / JCPL (10.45%) / ME (5.35%) / NEPTUNE* (1.13%) / PECO (11.33%) / PEPCO (5.18%) / PPL (31.99%) / PSEG (16.70%) / RE (0.61%)~~
b4036.13	765/500 kV substation work at new Mountain Stone		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)~~AEC (3.01%) / APS (11.60%) / DPL (2.65%) / JCPL (10.45%) / ME (5.35%) / NEPTUNE* (1.13%) / PECO~~

			~~(11.33%) / PEPCO (5.18%) / PPL (31.99%) / PSEG (16.70%) / RE (0.61%)~~

*Neptune Regional Transmission System, LLC

Kammer Juniata Transmission, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.14	765/500 kV substation work at new Buttermilk station		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (39.60%) / APS (0.01%) / ATSI (1.94%) / BGE (13.56%) / ComEd (0.80%) / Dayton (14.90%) / DEOK (20.50%) / DL (0.01%) / Dominion (0.03%) / DPL (0.01%) / EKPC (3.38%) / JCPL (2.45%) / ME (0.01%) / NEPTUNE* (0.24%) / OVEC (0.12%) / PEPCO (0.01%) / PPL (0.24%) / PSEG (2.11%) / RE (0.08%)~~BGE (27.67%) / Dayton (30.41%) / DEOK (41.83%) / DL (0.04%) / PENELEC (0.01%) / PEPCO (0.04%)~~
b4036.18	Construct two new single-circuit 500 kV t-lines between proposed Mountain Stone substation and Juniata substation. The total length of the line is 0.6 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)~~AEC (3.01%) / APS (11.60%) / DPL (2.65%) / JCPL (10.45%) / ME~~

			~~(5.35%) / NEPTUNE* (1.13%) / PECO (11.33%) / PEPCO (5.18%) / PPL (31.99%) / PSEG (16.70%) / RE (0.61%)~~

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(36) Grid Growth Ohio, LLC

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.3	Greentown - Teddy 765 kV line: Construct a 49.92-mile 765 kV AC overhead transmission line between the existing Greentown 765 kV substation and the proposed Teddy 765 kV Substation. (DAYTON Portion). The total line length is 137 miles of the Greentown to Teddy 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~AEP (78.72%) / ATSI (13.72%) / Dayton (3.84%) / DL (3.72%)~~AEC (0.49%) / AEP (57.78%) / ATSI (10.07%) / BGE (1.22%) / Dayton (2.82%) / DEOK (1.49%) / DL (2.73%) / Dominion (17.64%) / DPL (0.83%) / JCPL (0.96%) / NEPTUNE* (0.10%) / PECO (1.84%) / PEPCO (0.83%) / PSEG (1.16%) / RE (0.04%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.4	Greentown - Teddy 765 kV line: Construct a 27.08-mile 765 kV AC overhead transmission line between the existing Greentown 765 kV substation and the proposed Teddy 765 kV substation (ATSI Portion). The total line length is 137 miles of the Greentown to Teddy 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~AEP (78.72%) / ATSI (13.72%) / Dayton (3.84%) / DL (3.72%)~~ AEC (0.49%) / AEP (57.78%) / ATSI (10.07%) / BGE (1.22%) / Dayton (2.82%) / DEOK (1.49%) / DL (2.73%) / Dominion (17.64%) / DPL (0.83%) / JCPL (0.96%) / NEPTUNE* (0.10%) / PECO (1.84%) / PEPCO (0.83%) / PSEG (1.16%) / RE (0.04%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.7	Teddy - Marysville 765 kV: Construct 35.4-mile 765 kV AC overhead transmission line between the proposed 765 kV Teddy substation and the existing 765 kV Marysville substation (FE Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~ATSI (75.81%) / Dayton (0.01%) / DEOK (0.01%) / DL (24.17%)~~AEC (0.98%) / AEP (31.45%) / ATSI (16.09%) / BGE (1.84%) / DEOK (0.01%) / DL (5.13%) / Dominion (33.05%) / DPL (1.58%) / JCPL (2.08%) / NEPTUNE* (0.23%) / PECO (3.61%) / PEPCO (0.95%) / PSEG (2.90%) / RE (0.10%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.8	Teddy - Marysville 765 kV: Construct 35.4-mile 765 kV AC overhead transmission line between the proposed 765 kV Teddy substation and the existing 765 kV Marysville substation (AEP Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~AEP (85.96%) / Dayton (0.01%) / DEOK (0.01%) / DL (14.02%)~~AEC (0.98%) / AEP (31.45%) / ATSI (16.09%) / BGE (1.84%) / DEOK (0.01%) / DL (5.13%) / Dominion (33.05%) / DPL (1.58%) / JCPL (2.08%) / NEPTUNE* (0.23%) / PECO (3.61%) / PEPCO (0.95%) / PSEG (2.90%) / RE (0.10%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.11	Teddy - Beatty single-circuit 345 kV: Construct a new 18.66-mile 345 kV line between the proposed Teddy 345 kV substation and existing Beatty 345 kV substation on a shared structure with Teddy - Cole single-circuit 345 kV (FE portion). The total length of Teddy - Beatty 345 kV circuit is 32 miles		~~ATSI (14.18%) / Dayton (45.37%) / DEOK (40.45%)~~AEC (0.07%) / AEP (52.14%) / APS (0.21%) / ATSI (5.33%) / BGE (1.11%) / Dayton (17.06%) / DEOK (15.21%) / DL (0.72%) / Dominion (5.65%) / DPL (0.24%) / JCPL (0.03%) / ME (0.17%) / OVEC (0.16%) / PECO (0.36%) / PENELEC (0.11%) / PEPCO (1.26%) / PPL (0.17%)
b4068.12	Teddy - Beatty single-circuit 345 kV: Construct a new 13.34-mile 345 kV line between the proposed Teddy 345 kV substation and existing Beatty 345 kV substation on a shared structure with Teddy - Cole single-circuit 345 kV (AEP portion). The total length of Teddy - Beatty 345 kV circuit is 32 miles		~~AEP (61.77%) / Dayton (20.21%) / DEOK (18.02%)~~AEC (0.07%) / AEP (52.14%) / APS (0.21%) / ATSI (5.33%) / BGE (1.11%) / Dayton (17.06%) / DEOK (15.21%) / DL (0.72%) / Dominion (5.65%) / DPL (0.24%) / JCPL (0.03%) / ME (0.17%) / OVEC (0.16%) / PECO (0.36%) / PENELEC (0.11%) / PEPCO (1.26%) / PPL (0.17%)

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.13	Teddy - Cole single-circuit 345 kV: Construct a new 18.66 miles long 345 kV line between the proposed Teddy 345 kV substation and existing Cole 345 kV substation on a shared structure with Teddy - Beatty single circuit 345 kV. (FE portion). The total length of Teddy - Cole 345 kV circuit is 41.7 miles		~~ATSI (100%)~~AEC (0.14%) / AEP (71.90%) / ATSI (6.72%) / BGE (0.53%) / Dayton (7.26%) / DEOK (4.58%) / DL (1.09%) / Dominion (6.15%) / DPL (0.27%) / JCPL (0.21%) / NEPTUNE* (0.02%) / OVEC (0.03%) / PECO (0.56%) / PEPCO (0.43%) / PSEG (0.11%)
b4068.14	Teddy - Cole single-circuit 345 kV: Construct a new 32-mile 345 kV line between the proposed Teddy 345 kV substation and existing Cole 345 kV substation on a shared structure with Teddy - Beatty single circuit 345 kV (AEP portion). The total length of Teddy - Cole 345 kV circuit is 41.7 miles		~~AEP (100%)~~AEC (0.14%) / AEP (71.90%) / ATSI (6.72%) / BGE (0.53%) / Dayton (7.26%) / DEOK (4.58%) / DL (1.09%) / Dominion (6.15%) / DPL (0.27%) / JCPL (0.21%) / NEPTUNE* (0.02%) / OVEC (0.03%) / PECO (0.56%) / PEPCO (0.43%) / PSEG (0.11%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.19	Guernsey - Conesville 765 kV: Construct a new 32-mile single-circuit 765 kV AC overhead transmission line between the existing Guernsey 765 kV substation and the new 765 kV Conesville substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~AEP (71.03%) / APS (6.07%) / Dayton (9.59%) / DEOK (10.08%) / DL (1.68%) / EKPC (1.39%) / OVEC (0.16%)~~AEC (0.03%) / AEP (66.51%) / APS (5.68%) / ATSI (0.18%) / BGE (1.32%) / ComEd (0.60%) / Dayton (8.97%) / DEOK (9.44%) / DL (0.20%) / Dominion (0.84%) / DPL (0.04%) / EKPC (1.30%) / JCPL (0.09%) / ME (0.76%) / NEPTUNE* (0.01%) / OVEC (0.15%) / PECO (0.13%) / PENELEC (0.03%) / PEPCO (2.69%) / PPL (0.89%) / PSEG (0.13%) / RE (0.01%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.26	West Millersport - Adkins 765 kV: Construct a new 38-mile single-circuit 765 kV AC overhead transmission line between the new 765 kV West Millersport substation and the new 765 kV Adkins substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ~~AEP (71.83%) / ATSI (22.22%) / DL (5.95%)~~AEC (0.37%) / AEP (60.00%) / ATSI (18.56%) / Dayton (0.90%) / DL (4.97%) / Dominion (4.35%) / DPL (0.16%) / JCPL (1.62%) / ME (0.84%) / NEPTUNE* (0.17%) / PECO (1.39%) / PENELEC (0.79%) / PEPCO (3.03%) / PSEG (2.75%) / RE (0.10%)

*Neptune Regional Transmission System, LLC

Attachment B

Revised sections of Tariff, Schedule 12-Appendix A (in clean form)

SCHEDULE 12 – APPENDIX A

(4) Jersey Central Power & Light Company

Required Transmission 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 230 kV Substation		JCPL (100%)
b2271	Advance Raritan River - Replace G1047F breaker at the 230 kV Substation		JCPL (100%)
b2272	Advance Raritan River - Replace T1034E breaker at the 230 kV Substation		JCPL (100%)
b2273	Advance Raritan River - Replace T1034F breaker at the 230 kV Substation		JCPL (100%)
b2274	Advance Raritan River - Replace I1023E breaker at the 230 kV Substation		JCPL (100%)
b2275	Advance Raritan River - Replace I1023F breaker at the 230 kV 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 63 kA breaker		JCPL (100%)
b2357	Replace the East Windsor 230 kV breaker 'E1' with 63 kA breaker		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2495	Replace transformer leads on the Glen Gardner 230/34.5 kV #1 transformer		JCPL (100%)
b2496	Replace Franklin 115/34.5 kV transformer #2 with 90 MVA transformer		JCPL (100%)
b2497	Reconductor 0.9 miles of the Captive Plastics to Morris Park 34.5 kV circuit (397ACSR) with 556 ACSR		JCPL (100%)
b2498	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		JCPL (100%)
b2500	Upgrade terminal equipment at Monroe on the Englishtown to Monroe (H34) 34.5 kV circuit		JCPL (100%)
b2570	Upgrade limiting terminal facilities at Feneau, Parlin, and Williams substations		JCPL (100%)
b2571	Upgrade the limiting terminal facilities at both Jackson and North Hanover		JCPL (100%)
b2586	Upgrade the V74 34.5 kV transmission line between Allenhurst and Elberon Substations		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2633.6	Implement high speed relaying utilizing OPGW on Deans – East Windsor 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)
b2633.6.1	Implement high speed relaying utilizing OPGW on East Windsor - New Freedom 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)

* Neptune Regional Transmission System, LLC

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual 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 40 kA breakers		JCPL (100%)
b3042	Replace substation conductor at Raritan River 230 kV substation on the Kilmer line terminal		JCPL (100%)

Jersey Central Power & Light Company (cont.)

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

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3130.11	Replace four Atlantic 34.5 kV breakers (BK1A, BK1B, BK3A and BK3B) with 63 kA rated breakers and associated equipment		JCPL (100%)
b3130.12	Replace six Werner 34.5 kV breakers (E31A_Prelim, E31B_Prelim, V48 future, W101, M39 and U99) with 40 kA rated breakers and associated equipment		JCPL (100%)
b3238	Replace seven (7) overdutied 34.5 kV breakers with 50 kA rated equipment at the Whippany substation		JCPL (100%)
b3239	Replace fourteen (14) overdutied 34.5 kV breakers with 63 kA rated equipment		JCPL (100%)
b3674	Replace five Atlantic 34.5 kV breakers (J36, BK1A, BK1B, BK3A and BK3B) with 63 kA rated breakers and associated equipment		JCPL (100%)
b3675	Replace six Werner 34.5 kV breakers (E31A_Prelim, E31B_Prelim, V48 future, W101, M39 and U99) with 40 kA rated breakers and associated equipment		JCPL (100%)
b3676	Replace Freneau 34.5 kV breaker (BK6) with 63 kA rated breakers and associated equipment		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3860.1	Replace the 34.5 kV bus tie breaker at Chester Substation with a new 34.5 kV breaker that has an interruption capability of 40 kA		JCPL (100%)
b3861.1	Replace the W101 34.5 kV breaker at Werner Substation with a new 34.5 kV breaker that has an interruption capability of 40 kA		JCPL (100%)
b3986.1	Replace 14 Windsor 34.5 kV breakers.		JCPL (100%)
b3987.1	Replace East Flemington 34.5 kV circuit breakers C731, V724, A729, TC, H736, AV, YH and Y727 with 40 kA, 3000A breakers.		JCPL (100%)
b4013.1	Install a 10.8 MVAR capacitor at Colts Neck 34.5 kV substation.		JCPL (100%)
b4014.1	Install a 34.5 kV Capacitor at Sussex substation.		JCPL (100%)
b4015.1	At Long Branch substation replace the 34.5 kV line terminal switch.		JCPL (100%)
b4016.1	Rebuild the Jamesburg-Monroe 34.5 kV N40 line from Jamesburg substation to Monroe Junction substation, approximately 1.2 miles.		JCPL (100%)
b4016.2	Replace limiting conductor and revise relay settings at Monroe substation.		JCPL (100%)
b4016.3	Install new relay and revise relay settings at Costco substation.		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4016.4	Rebuild a section of the Englishtown-Monroe Junction 34.5 kV H34 line that is mutual with the Costco-Monroe Junction 34.5 kV N40 line near Monroe Junction substation, approximately 0.4 miles.		JCPL (100%)
b4017.1	Upgrade line relaying at Van Hiseville substation.		JCPL (100%)
b4017.2	Rebuild Great Adventure 34.5 kV substation as an eleven-breaker, breaker-and-a-half station.		JCPL (100%)
b4017.3	Upgrade line relaying at Windsor substation.		JCPL (100%)
b4017.4	Rebuild the Cookstown-Windsor 34.5 kV H60 line from Cookstown substation to Str No. 58 as a double circuit, approximately 4.7 miles. Terminate new line into Cookstown substation.		JCPL (100%)
b4017.5	Rebuild the Cookstown-Van Hiseville 34.5 kV V22 line from Str No. 91445 to Greater Adventure substation as a double circuit, approximately 5.2 miles.		JCPL (100%)
b4017.6	At Cookstown substation, replace 34.5 kV breaker, two disconnect switches, relaying and ancillary terminal equipment.		JCPL (100%)
b4018.1	Purchase land needed to support construction of new 34.5 kV switching station.		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4018.2	Replace line relaying at South Lakewood substation.		JCPL (100%)
b4018.3	Terminate 34.5 kV lines to new 34.5 kV ring bus station. Change drawings and nameplates for new line terminal names.		JCPL (100%)
b4018.4	Replace limiting conductor at Larrabee substation.		JCPL (100%)
b4018.5	Remove equipment and add breakers and switches at Metedeconk substation. Remove equipment to isolate transformers.		JCPL (100%)
b4018.6	Replace line relaying at Leisure Village substation.		JCPL (100%)
b4018.7	Reconfigure 34.5 kV switchyard at Metedeconk substation to a breaker-and-a-half yard.		JCPL (100%)
b4018.8	Build a new 34.5 kV ring bus switching station (Adjacent to Vermont Avenue substation).		JCPL (100%)
b4018.9	Loop the Leisure Village-South Lakewood 34.5 kV F214 line into the new 34.5 kV ring bus station, approximately 0.1 miles.		JCPL (100%)
b4018.10	Install new hardware and wire on the Herbertsville - Larrabee 34.5 kV Q43 line to support the rebuild project of approximately 2.6 miles.		JCPL (100%)
b4018.11	Install new hardware and wire on the Larrabee - Point Pleasant No. 2 34.5 kV R44 line to support the rebuild project, approximately 2.6 miles.		JCPL (100%)

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4018.12	Install a new tie line (circuit 1) from the existing Vermont Avenue substation to the new 34.5 kV ring bus station, approximately 0.1 miles.		JCPL (100%)
b4018.13	Install a new tie line (circuit 2) from the existing Vermont Avenue Substation to the new 34.5 kV ring bus station, approximately 0.1 miles.		JCPL (100%)
b4032.1	Install a 500 kV double-breaker double-bus at Montville substation Install a 500/230 kV transformer and 500 kV breaker. Install new breaker string in the 230 kV yard to create a breaker-and-a-half layout. Reterminate the 230-34.5 kV transformers.		AEC (0.35%) / APS (0.23%) / DPL (0.30%) / JCPL (40.38%) / ME (1.13%) / NEPTUNE* (1.60%) / PECO (1.46%) / PENELEC (0.41%) / PSEG (52.24%) / RE (1.90%)
b4032.2	Replace the 2-pole wood structure No. 154 on the Montville-Whippany 34.5 kV, K115 line with a monopole and UG riser. Install approximately 200 ft. of new UG conductor to be spliced with existing section of UG conductor into Montville substation.		AEC (0.52%) / DPL (0.61%) / JCPL (82.56%) / ME (0.17%) / NEPTUNE* (3.17%) / PECO (2.27%) / PSEG (10.33%) / RE (0.37%)

* Neptune Regional Transmission System, LLC

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4032.3	Replace the 2-pole wood structure No. 154 on the Montville-Whippany 34.5 kV O93 line with a monopole UG riser and install approximately 200 ft. of new UG conductor to be spliced with existing section of UG conductor into the Montville substation.		AEC (0.43%) / DPL (0.51%) / JCPL (84.97%) / ME (0.14%) / NEPTUNE* (2.66%) / PECO (1.89%) / PSEG (9.07%) / RE (0.33%)

* Neptune Regional Transmission System, LLC

Jersey Central Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4042.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5DYN-JCPL03.		JCPL (100%)
b4043.1	2024W1 P5: Modify relay wiring: Addressing FG No. 2024-P5-JCPL06.		JCPL (100%)
b4045.1	2024W1 P5: Install relay panel and modify relay wiring: Addressing FG No. 2024-P5-JCPL01.		JCPL (100%)
b4046.1	2024W1 P5: Install battery monitoring, DC panel, and modify relay wiring: Addressing FG No. 2024-P5DYN-JCPL04.		JCPL (100%)
b4047.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5-JCPL03.		JCPL (100%)
b4049.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5DYN-JCPL02.		JCPL (100%)
b4067.1	2024W1 P5: Install battery monitoring, DC panel, and modify relay wiring: Addressing FG No. 2024-P5DYN-JCPL01.		JCPL (100%)

SCHEDULE 12 – APPENDIX A

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

Required Transmission Enhancements		Annual Revenue Requirement	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 40 kA breaker		PENELEC (100%)
b2294	Replace the Johnstown 115 kV breaker 'Bon Aire' with 40 kA breaker		PENELEC (100%)
b2302	Replace the Erie South 115 kV breaker 'French #2' with 40 kA 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%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2494	Construct Warren 230 kV ring bus and install a second Warren 230/115 kV transformer		PENELEC (100%)
b2552.1	Reconductor the North Meshoppen – Oxbow-Lackawanna 230 kV circuit and upgrade terminal equipment (MAIT portion)		PENELEC (100%)
b2573	Replace the Warren 115 kV 'B12' breaker with a 40 kA breaker		PENELEC (100%)
b2587	Reconfigure Pierce Brook 345 kV station to a ring bus and install a 125 MVAR shunt reactor at the station		PENELEC (100%)
b2621	Replace relays at East Towanda and East Sayre 115 kV substations (158/191 MVA SN/SE)		PENELEC (100%)
b2677	Replace wave trap, bus conductor and relay at Hilltop 115 kV substation. Replace relays at Prospect and Cooper substations		PENELEC (100%)
b2678	Convert the East Towanda 115 kV substation to breaker and half configuration		PENELEC (100%)
b2679	Install a 115 kV Venango Jct. line breaker at Edinboro South		PENELEC (100%)
b2680	Install a 115 kV breaker on Hooversville #1 115/23 kV transformer		PENELEC (100%)
b2681	Install a 115 kV breaker on the Eclipse #2 115/34.5 kV transformer		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	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 40 kA breaker		PENELEC (100%)
b2736	Replace the Warren 115 kV 'Warren #1' breaker with 40 kA breaker		PENELEC (100%)
b2737	Replace the Warren 115 kV 'A TX #1' breaker with 40 kA breaker		PENELEC (100%)
b2738	Replace the Warren 115 kV 'A TX #2' breaker with 40 kA breaker		PENELEC (100%)
b2739	Replace the Warren 115 kV 'Warren #2' breaker with 40 kA 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%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual 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%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2806	Install a new relay and replace meter at the Raystown 46 kV substation, on the Raystown – Smithfield 46 kV circuit		PENELEC (100%)
b2807	Replace the CHPV and CRS relay, and adjust the IAC overcurrent relay trip setting; or replace the relay at Eldorado 46 kV substation, on the Eldorado – Gallitzin 46 kV circuit		PENELEC (100%)
b2808	Adjust the JBC overcurrent relay trip setting at Raystown 46 kV, and replace relay and 4/0 CU bus conductor at Huntingdon 46 kV substations, on the Raystown – Huntingdon 46 kV circuit		PENELEC (100%)
b2865	Replace Seward 115 kV breaker "Jackson Road" with 63 kA breaker		PENELEC (100%)
b2866	Replace Seward 115 kV breaker "Conemaugh N." with 63 kA breaker		PENELEC (100%)
b2867	Replace Seward 115 kV breaker "Conemaugh S." with 63 kA breaker		PENELEC (100%)
b2868	Replace Seward 115 kV breaker "No.8 Xfmr" with 63 kA breaker		PENELEC (100%)
b2944	Install two 345 kV 80 MVAR shunt reactors at Mainesburg station		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual 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 50 kA breaker		PENELEC (100%)
b2954	Replace the Keystone 500 kV breaker "NO. 16 Cabot" with 50 kA 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%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

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

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual 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. Replace bus conductor		PENELEC (100%)
b3043	Install one 115 kV 36 MVAR capacitor at West Fall 115 kV substation		PENELEC (100%)
b3073	Replace the Blairsville East 138/115 kV transformer and associated equipment such as breaker disconnects and bus conductor		PENELEC (100%)
b3077	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%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3231	Replace the existing No. 2 cap bank breaker at Huntingdon substation with a new breaker with higher interrupting capability		PENELEC (100%)
b3232	Replace the existing Williamsburg, ALH (Hollidaysburg) and bus section breaker at the Altoona substation with a new breaker with higher interrupting capability		PENELEC (100%)
b3233	Install one (1) 34 MVAR 115 kV shunt reactor and breaker. Install one (1) 115 kV circuit breaker to expand the substation to a 4-breaker ring bus		PENELEC (100%)
b3237	Install two (2) 46 kV 6.12 MVAR capacitors effective at Mt. Union		PENELEC (100%)
b3245	Construct a new breaker-and-a-half substation near Tiffany substation. All transmission assets and lines will be relocated to the new substation. The two (2) distribution transformers will be fed via two (2) dedicated 115 kV feeds to the existing Tiffany substation		PENELEC (100%)
b3306	Install a second 125 MVAR 345 kV shunt reactor and associated equipment at Pierce Brook substation. Install a 345 kV breaker on the high side of the 345/230 kV transformer #1		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3665	Replace several pieces of 1033.5 AAC substation conductor at East Towanda 230 kV station on East Towanda - Canyon 230 kV line		PENELEC (100%)
b3666	Install dual reactors and expand existing ring bus at Marshall 230 kV substation		PENELEC (100%)
b3667	Install second 230/115 kV transformer at Pierce Brook substation		PENELEC (100%)
b3672	Rebuild 2.5 miles of East Towanda-North Meshoppen 115 kV line with 1113 ACSS conductor using single circuit construction. Upgrade all terminal equipment to the rating of 1113 ACSS		PENELEC (100%)
b3673	Replace the relay panels at Bethlehem 33 46 kV substation on the Cambria Prison line		PENELEC (100%)
b3708	Replace the Shawville 230/115/17.2 kV transformer with a new Shawville 230/115 kV transformer and associated facilities. Replace the plant's No. 2B 115/17.2 kV transformer with a larger 230/17.2 kV transformer		PENELEC (100%)
b3750	Upgrade Seward terminal equipment of Seward – Blairsville 115 kV line to increase the line rating such that the transmission line conductor is the limiting component		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3751	Rebuild 6.4 miles of Roxbury – Shade Gap 115 kV line from Roxbury to the AE1-071 115 kV ring bus with single circuit 115 kV construction		PENELEC (100%)
b3752	Rebuild 7.2 miles of the Shade Gap – AE1-071 115 kV line section of the Roxbury – Shade Gap 115 kV line		PENELEC (100%)
b3753	Replace the Tyrone North 115 /46 kV transformer with a new standard 75 MVA top rated bank and upgrade the entire terminal to minimum 100 MVA capability for both SN and SE rating		PENELEC (100%)
b3754	Construct a new three breaker ring bus to tie into the Warrior Ridge - Belleville 46 kV D line and the 1LK line at Maclane Tap		PENELEC (100%)
b3765	Purchase one 80 MVAR 345 kV spare reactor, to be located at the Mainesburg 345 kV station		PENELEC (100%)
b3783	Cut and remove the 345 kV and 230 kV generator lead lines at Homer City station. Install new station service supply, separate AC station service, separate protection and controls schemes, and review and adjust relay protection settings		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3791.0	Rebuild the North Meshoppen - Mehoopany No. 1 115 kV line with 795 ACSR 26/7 STR conductor. Upgrade terminal equipment to exceed transmission line ratings		PENELEC (100%)
b3792.0	Rebuild the North Meshoppen - Mehoopany No. 2 115 kV line using 795 ACSR 26/7 STR conductor, and upgrade terminal equipment to exceed the transmission line rating		PENELEC (100%)
b4008.1	2024W1 P5: Install open-battery monitoring and modify relay wiring: Addressing FG No. 2024-P5DYN-PN01		PENELEC (100%)
b4009.1	2024W1 P5: Modify relay wiring: Addressing FG No. 2024-P5-PN03		PENELEC (100%)
b4010.1	2024W1 P5: Install open-battery monitoring and modify relay wiring: Addressing FG No. 2024-P5DYN-PN05		PENELEC (100%)
b4012.1	Belleville-Center Union 46 kV line – Replace structures and use 795 ACSR 26/7 conductor on spans D-356 through D-360		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.1	Upgrade Keystone terminal of Keystone - South Bend 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.04%) / AEP (0.36%) / APS (2.13%) / ATSI (11.52%) / BGE (12.47%) / ComEd (0.99%) / Dayton (0.21%) / DEOK (0.32%) / DL (0.42%) / Dominion (2.48%) / DPL (4.33%) / EKPC (0.08%) / JCPL (6.39%) / ME (1.27%) / NEPTUNE* (0.68%) / PECO (0.12%) / PENELEC (1.05%) / PEPCO (0.26%) / PPL (43.08%) / PSEG (11.38%) / RE (0.42%)

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.3	Upgrade Keystone terminal of Keystone - Juniata 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (3.06%) / AEP (1.54%) / Dayton (0.50%) / DEOK (1.31%) / Dominion (5.70%) / DPL (2.76%) / EKPC (0.80%) / JCPL (10.41%) / ME (6.83%) / NEPTUNE* (1.13%) / PECO (11.62%) / PEPCO (4.73%) / PPL (32.94%) / PSEG (16.09%) / RE (0.58%)

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.19	Replace nine 500 kV circuit breakers at Conemaugh 500 kV substation with new 63 kA, 5000A breakers		PENELEC (100%)

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.20	Transmission line Work: Loop in Keystone - Conemaugh 500 kV into Buttermilk Falls - Establish Keystone - Buttermilk Falls		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (4.51%) / AEP (0.21%) / APS (0.68%) / ATSI (0.67%) / BGE (0.11%) / Dayton (0.05%) / DEOK (0.06%) / DL (0.36%) / Dominion (9.39%) / DPL (7.27%) / EKPC (0.01%) / JCPL (9.33%) / ME (4.18%) / NEPTUNE* (1.00%) / OVEC (0.02%) / PECO (17.05%) / PENELEC (0.07%) / PEPCO (11.25%) / PPL (22.28%) / PSEG (11.10%) / RE (0.40%)

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.21	Upgrade Keystone terminal of Keystone - Buttermilk Fall 500 kV line (formerly Keystone - Conemaugh)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (4.51%) / AEP (0.21%) / APS (0.68%) / ATSI (0.67%) / BGE (0.11%) / Dayton (0.05%) / DEOK (0.06%) / DL (0.36%) / Dominion (9.39%) / DPL (7.27%) / EKPC (0.01%) / JCPL (9.33%) / ME (4.18%) / NEPTUNE* (1.00%) / OVEC (0.02%) / PECO (17.05%) / PENELEC (0.07%) / PEPCO (11.25%) / PPL (22.28%) / PSEG (11.10%) / RE (0.40%)

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.22	Transmission line work: Loop in Keystone - Conemaugh 500 kV into Buttermilk Falls. Establish Conemaugh - Buttermilk Falls		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.64%) / AEP (20.49%) / APS (3.13%) / ATSI (19.28%) / BGE (12.28%) / ComEd (0.60%) / Dayton (2.37%) / DEOK (2.10%) / DL (6.87%) / Dominion (2.26%) / DPL (0.84%) / EKPC (0.02%) / JCPL (0.52%) / ME (1.13%) / NEPTUNE* (0.06%) / OVEC (0.03%) / PECO (5.41%) / PENELEC (1.89%) / PEPCO (1.65%) / PPL (16.74%) / PSEG (0.67%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.23	Upgrade Conemaugh terminal of Conemaugh - Buttermilk Fall 500 kV line (formerly Keystone - Conemaugh)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.64%) / AEP (20.49%) / APS (3.13%) / ATSI (19.28%) / BGE (12.28%) / ComEd (0.60%) / Dayton (2.37%) / DEOK (2.10%) / DL (6.87%) / Dominion (2.26%) / DPL (0.84%) / EKPC (0.02%) / JCPL (0.52%) / ME (1.13%) / NEPTUNE* (0.06%) / OVEC (0.03%) / PECO (5.41%) / PENELEC (1.89%) / PEPCO (1.65%) / PPL (16.74%) / PSEG (0.67%) / RE (0.02%)
b4055.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5DYN-PN04		PENELEC (100%)

*Neptune Regional Transmission System, LLC

Mid-Atlantic Interstate Transmission, LLC for the Pennsylvania Electric Company Zone (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4056.1	2024W1 P5: Move backup relaying DC supply to separate battery and modify relay wiring Addresses FG No. 2024-P5DYN-PN02		PENELEC (100%)
b4065.1	2024W1 P5: Install battery monitoring system & replace 2 115kV line protection schemes. Addresses FG No. 2024-P5-PN04		PENELEC (100%)
b4065.2	2024W1 P5: Install 1 relay panel at a confidential substation connected to the substation associated with b4065.1. Addresses FG No. 2024-P5-PN04		PENELEC (100%)
b4066.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5-PN05		PENELEC (100%)
b4071.1	2024W1 P5: Separate DC supply to backup relaying and the second trip coils, modify relay wiring: Addressing FG No. 2024-P5DYN-PN03		PENELEC (100%)

SCHEDULE 12 – APPENDIX A

(9) PPL Electric Utilities Corporation

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1813.12	Replace the Blooming Grove 230 kV breaker 'Peckville'		PPL (100%)
b2223	Rebuild and reconductor 2.6 miles of the Sunbury - Dauphin 69 kV circuit		PPL (100%)
b2224	Add a 2nd 150 MVA 230/69 kV transformer at Springfield		PPL (100%)
b2237	150 MVAR shunt reactor at Alburtis 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PPL (100%)
b2238	100 MVAR shunt reactor at Elimsport 230 kV		PPL (100%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2269	Rebuild approximately 23.7 miles of the Susquehanna - Jenkins 230 kV 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%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		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 900 MVA 500-230 kV transformer and associated equipment		PPL (100%)
b2552.2	Reconductor the North Meshoppen - Oxbow – Lackawanna 230 kV circuit and upgrade terminal equipment (PPL portion)		PENELEC (63.82%) / PPL (36.18%)
b2574	Replace the Sunbury 230 kV 'MONTOUR NORT' breaker with a 63 kA 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%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2716	Add a 200 MVAR shunt reactor at Lackawanna 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PPL (100%)
b2754.1	Install 7 miles of optical ground wire (OPGW) between Gilbert and Springfield 230 kV substations		PPL (100%)
b2754.4	Use ~ 40 route miles of existing fibers on PPL 230 kV system to establish direct fiber circuits		PPL (100%)
b2754.5	Upgrade relaying at Martins Creek 230 kV		PPL (100%)
b2756	Install 2% reactors at Martins Creek 230 kV		PPL (100%)
b2813	Expand existing Lycoming 69 kV yard to double bus double breaker arrangement		PPL (100%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2824	Reconfigure/Expand the Lackawanna 500 kV substation by adding a third bay with three breakers		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PPL (100%)
b2838	Build a new 230/69 kV substation by tapping the Montour – Susquehanna 230 kV double circuits and Berwick – Hunlock & Berwick – Colombia 69 kV circuits		PPL (100%)
b2979	Replace Martins Creek 230 kV circuit breakers with 80 kA rating		PPL (100%)
b3221	Replace terminal equipment (bus conductor) on the 230 kV side of the Steel City 500/230 kV Transformer #1		PPL (100%)
b3222	Install one (1) 7.2 MVAR fixed cap bank on the Lock Haven – Reno 69 kV line and one (1) 7.2 MVAR fixed cap bank on the Lock Haven – Flemington 69 kV line near the Flemington 69/12 kV substation		PPL (100%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3664	Replace the limiting 230 kV T2 transformer leads, bay conductor and bus conductor with double bundle 1590 ACSR at the Juniata station; Replace the limiting 1200 A MODs on the bus tie breaker with 3000 A MODs		PPL (100%)
b3698	Reconductor the 14.2 miles of the existing Juniata –Cumberland 230 kV line with 1272 ACSS/TW HS285 "Pheasant" conductor		AEC (4.17%) / BGE (13.18%) / DEOK (1.22%) / Dominion (3.25%) / DPL (9.14%) / ECP** (0.11%) / EKPC (0.22%) / HTP*** (0.20%) /JCPL (1.15%) / ME (27.02%) / NEPTUNE* (0.64%) / PECO (18.88%) / PEPCO (4.68%) / PSEG (16.14%)
b3715.1	Install a new 300 MVA 230/115 kV transformer at the existing PPL Williams Grove substation		ME (100%)
b3715.2	Construct a new approximately 3.4 miles 115 kV single circuit transmission line from Williams Grove to Allen substation		ME (100%)

* Neptune Regional Transmission System, LLC
**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3774	Upgrade terminal equipment at Brunner Island station on Brunner Island – Yorkana 230 kV line		PPL (100%)
b3800.1	Build a New Otter Creek 500 kV (Collinsville) switching station with two bay three breaker configuration		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.16%) / BGE (0.71%) / Dominion (74.28%) / DPL (0.36%) / PECO (0.68%) / PEPCO (10.59%) / PPL (0.22%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.3	New Otter Creek (Collinsville) to Doubs 500 kV Line (Otter Creek 500 kV - MD Border). Rebuild and expand existing approximately 12 miles of Otter Creek - Conastone 230 kV line to become a double-circuit 500 and 230 kV lines		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.16%) / BGE (0.71%) / Dominion (74.28%) / DPL (0.36%) / PECO (0.68%) / PEPCO (10.59%) / PPL (0.22%)
b3800.53	Construct a double-circuit 500 kV line from the existing TMI - Peach Bottom 500 kV right-of-way to the proposed Chanceford switchyard, approximately 1.0 miles in length		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.37%) / Dominion (75.27%) / PEPCO (11.36%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.54	Perform final tie-ins and commissioning for Chanceford - Doubs 500 kV line energization, upon completion of all transmission owner segments within PA & MD		PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3908.1	Install one 80 MVAr 230 kV capacitor bank at Pocono 230 kV Substation		PPL (100.00%)
b3909.1	Juniata 500 kV yard expansion/reconfiguration to include one new bay and eliminate the line fault stuck breaker		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PPL (100%)
b3910.1	Susquehanna T10 230 kV Station Reconfiguration. Break the existing Susquehanna - Glen Brook 230 kV line and loop it 0.2 miles in and out of the Susquehanna T10 230 kV Station		PPL (100.00%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.1	Expand existing Slykerville 230 kV station to add a 500 kV yard. Build a new Kelayres 500 kV breaker-and-a-half substation. Add two 890 MVA, 500/230 kV transformers at Kelayres		DPL (0.14%) / JCPL (3.70%) / ME (0.31%) / PECO (2.23%) / PPL (93.62%)
b4029.2	Add one 500 kV 4,000 amp circuit breaker, two 500 kV 4,000 amp MODs, and a Kelayres 890 MVA 500/230 kV T3 transformer		DPL (0.14%) / JCPL (3.70%) / ME (0.31%) / PECO (2.23%) / PPL (93.62%)
b4029.3	Bifurcate the Sunbury - Susquehanna 500 kV line. From the bifurcation point, build a 13-mile extension to Kelayres, resulting in a Susquehanna-Kelayres 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (8.14%) / APS (0.19%) / ATSI (5.97%) / ComEd (0.05%) / Dayton (0.81%) / DEOK (0.93%) / DL (2.81%) / Dominion (6.90%) / EKPC (0.15%) / ME (0.03%) / OVEC (0.01%) / PENELEC (4.07%) / PEPCO (0.12%) / PPL (69.81%) / PSEG (0.01%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.4	Bifurcate the Sunbury-Susquehanna 500 kV line bringing both segments into a new Kelayres 500 kV station on separate towers. From the bifurcation point, build a 24-mile extension to Kelayres, resulting in a Sunbury-Kelayres 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.83%) / AEP (0.04%) / ATSI (0.02%) / BGE (0.31%) / DEOK (0.01%) / DL (0.01%) / Dominion (0.06%) / DPL (0.33%) / JCPL (16.05%) / ME (2.12%) / NEPTUNE* (1.67%) / PECO (7.75%) / PENELEC (0.02%) / PEPCO (0.01%) / PPL (31.30%) / PSEG (36.16%) / RE (1.31%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement		Responsible Customer(s)
b4029.5	Susquehanna - Tomhicken 230 kV 1 and 2 DCT line reconductor: Reconduct both circuits on the existing DCT tower with ACCC 1036/87/392 (2045 kcmil) conductor		AEC (0.49%) / AEP (2.04%) / APS (0.04%) / BGE (3.80%) / Dayton (0.22%) / DEOK (0.38%) / Dominion (8.21%) / DPL (0.70%) / EKPC (0.18%) / JCPL (2.47%) / ME (2.09%) / NEPTUNE* (0.08%) / OVEC (0.01%) / PECO (2.98%) / PENELEC (0.65%) / PEPCO (2.95%) / PPL (72.71%)
b4029.6	Upgrade the existing Monroe 230/138 kV substation to a two-bay breaker and a half on the 230 kV side (with space to accommodate two future bays), and a double-bus double-breaker design on the 138 kV side		AEC (0.68%) / AEP (1.21%) / APS (0.18%) / ATSI (0.18%) / BGE (1.51%) / Dayton (0.11%) / DEOK (0.17%) / DL (0.23%) / Dominion (3.78%) / DPL (0.32%) / EKPC (0.08%) / JCPL (4.51%) / ME (1.55%) / NEPTUNE* (0.26%) / OVEC (0.01%) / PECO (1.21%) / PENELEC (0.51%) / PEPCO (1.25%) / PPL (66.75%) / PSEG (14.96%) / RE (0.54%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.7	Retermination of the Monroe-Fox Hill and Monroe-Martins Creek 230 kV lines into their new locations in the upgraded 230 kV breaker-and-a-half yard		AEC (0.08%) / AEP (0.66%) / APS (0.01%) / ATSI (2.67%) / BGE (0.09%) / Dayton (0.15%) / DEOK (0.12%) / DL (0.17%) / Dominion (0.06%) / DPL (0.20%) / JCPL (0.56%) / ME (12.49%) / NEPTUNE* (0.04%) / PECO (0.06%) / PENELEC (0.12%) / PEPCO (0.04%) / PPL (58.85%) / PSEG (22.80%) / RE (0.83%)
b4029.8	Address end-of-life concerns by rebuilding the existing 38-mile Juniata-Sunbury 500 kV line using single-circuit design		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.96%) / AEP (14.81%) / APS (2.45%) / ATSI (8.22%) / BGE (4.90%) / (0.04%) / Dayton (1.57%) / DEOK (2.13%) / DL (3.18%) / Dominion (29.27%) / DPL (2.99%) / EKPC (0.63%) / JCPL (3.68%) / ME (0.64%) / NEPTUNE* (0.32%) / OVEC (0.03%) / PECO (2.38%) / PENELEC (4.78%) / PEPCO (7.71%) / PPL (3.29%) / PSEG (5.81%) / RE (0.21%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.9	The Montour-Glen Brook 230 kV 1 and 2 DCT line is 24.9 miles long. For this project, the developer will reconduct 0.70 miles of this route with ACCC 1036/87/392 (2045 kcmil) conductor. Another 5.2 miles of the route will be rebuilt with new steel pole structures and double-bundle 1590 ACSR conductor. The remaining 19 miles of the route is being rebuilt and reconductored as part of supplemental project s2373 to address end of life for CORTEN structures.		AEC (2.09%) / APS (0.51%) / BGE (3.49%) / DEOK (0.07%) / Dominion (4.01%) / EKPC (0.02%) / JCPL (12.28%) / ME (2.08%) / NEPTUNE* (1.35%) / PECO (5.25%) / PENELEC (0.02%) / PEPCO (1.96%) / PPL (39.65%) / PSEG (26.27%) / RE (0.95%)
b4029.10	At Glen Brook 230/69 kV substation, replace ten 230 kV, 2000A MODs with 230 kV, 3000A MODs		PPL (100%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.11	At the Jenkins 230/69 kV substation, re-terminate the Jenkins 230/69 kV T2 and T4 transformers into bay positions in the 69 kV and 230 kV yards, respectively. Add one new 230 kV, 3000A circuit breaker, and two 230 kV, 3000A MODs to accommodate the retermination of the T4 transformer into the east bay position in the existing 230 kV breaker-and-a-half bay 2. Add two new 69 kV, 3000A circuit breakers and four 69 kV, 3000A switches to accommodate the retermination of the T2 transformer into a new 69 kV double-bus double-breaker Bay 4		AEC (0.03%) / JCPL (0.15%) / NEPTUNE* (0.02%) / PPL (99.36%) / PSEG (0.42%) / RE (0.02%)
b4029.12	Reterminate high side of T4 transformer into Bay 2E of the 230 kV yard		AEC (0.03%) / JCPL (0.08%) / NEPTUNE* (0.02%) / PPL (99.40%) / PSEG (0.45%) / RE (0.02%)
b4029.13	Glen Brook - Susquehanna T10 1 & 2 DCT line reconductor		AEC (2.38%) / APS (0.58%) / BGE (3.97%) / DEOK (0.08%) / DL (0.01%) / Dominion (4.56%) / EKPC (0.02%) / JCPL (13.97%) / ME (2.37%) / NEPTUNE* (1.54%) / PECO (5.98%) / PENELEC (0.03%) / PEPCO (2.23%) / PPL (31.28%) / PSEG (29.91%) / RE (1.09%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4029.14	Susquehanna T10 - Susquehanna 230 kV No. 3 line: Construct a new Susquehanna T10-Susquehanna 230 kV No. 3 line (~2.7 miles) using an approximately 75% brownfield route, with a short greenfield segment near the Susquehanna station		AEC (2.12%) / AEP (0.25%) / APS (0.93%) / BGE (4.99%) / Dayton (0.06%) / DEOK (0.18%) / Dominion (7.03%) / DPL (0.56%) / EKPC (0.10%) / JCPL (10.95%) / ME (2.62%) / NEPTUNE* (1.16%) / PECO (7.04%) / PEPCO (3.12%) / PPL (39.63%) / PSEG (18.58%) / RE (0.68%)
b4029.15	Construct a new breaker-and-a-half bay at Susquehanna T10 230 kV station and initially populate with two 230 kV, 3000A circuit breakers and four 230 kV, 3000A MODs, leaving a position for a future breaker to be added		AEC (2.12%) / AEP (0.25%) / APS (0.93%) / BGE (4.99%) / Dayton (0.06%) / DEOK (0.18%) / Dominion (7.03%) / DPL (0.56%) / EKPC (0.10%) / JCPL (10.95%) / ME (2.62%) / NEPTUNE* (1.16%) / PECO (7.04%) / PEPCO (3.12%) / PPL (39.63%) / PSEG (18.58%) / RE (0.68%)
b4029.16	Reuse existing bay and upgrade to 3000A. Existing bay at Susquehanna vacated by the former Sunbury line. Inspect all facilities, refurbish and insure bay rating of 3000A		AEC (2.12%) / AEP (0.25%) / APS (0.93%) / BGE (4.99%) / Dayton (0.06%) / DEOK (0.18%) / Dominion (7.03%) / DPL (0.56%) / EKPC (0.10%) / JCPL (10.95%) / ME (2.62%) / NEPTUNE* (1.16%) / PECO (7.04%) / PEPCO (3.12%) / PPL (39.63%) / PSEG (18.58%) / RE (0.68%)
b4029.18	Replace Six 230 kV breakers at Susquehanna		PPL (100%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.4	Upgrade Juniata terminal of Keystone - Juniata 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (3.06%) / AEP (1.54%) / Dayton (0.50%) / DEOK (1.31%) / Dominion (5.70%) / DPL (2.76%) / EKPC (0.80%) / JCPL (10.41%) / ME (6.83%) / NEPTUNE* (1.13%) / PECO (11.62%) / PEPCO (4.73%) / PPL (32.94%) / PSEG (16.09%) / RE (0.58%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.15	Install two new 500 kV circuit breaker at North and South bus to terminate the 765-500 kV transformers leads. Upgrade protection settings at Juniata (PPL Work)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)

* Neptune Regional Transmission System, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.17	Install two new 500 kV circuit breakers with 63 kA, 5000A rating in transformer T24 and T25 bay. Both transformers will be in double bus double breaker position after adding these two new breakers. (Sunbry)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)

* Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(10) Potomac Electric Power Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2279	Add two 100 MVAR reactors at Dickerson Station H and two 100 MVAR reactors at Brighton 230 kV substation		PEPCO (100%)
b2372	Upgrade the Chalk Point - T133TAP 230 kV Ck. 1 (23063) and Ckt. 2 (23065) to 1200 MVA ACCR		BGE (100%)
b3780.11	Add a 350 MVAR STATCOM and a 350 MVAR capacitor at Brighton 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PEPCO (100%)
b3780.12	Add a 250 MVAR capacitor at Burchess Hill 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PEPCO (100%)

*Neptune Regional Transmission System, LLC

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

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.33	Replace terminal equipment limitations at Brighton 500 kV - on the existing Brighton - Waugh Chapel 500 kV (5053) line or the new Brighton - High Ridge 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.68%) / BGE (86.77%) / Dominion (1.91%) / PEPCO (10.64%)
b3800.38	Chalk Point - Cheltenham 500 kV line (5073 line) - Replace relay at Chalk Point 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (39.75%) / Dominion (59.03%) / PEPCO (1.22%)

*Neptune Regional Transmission System, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.40	Conastone - Brighton 500 kV line (5011 line) - Replace terminal equipment limitations at Brighton 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (9.65%) / Dominion (63.04%) / DPL (0.02%) / PEPCO (27.29%)
b3800.243	Rebuild 7.26 miles of existing 230 kV circuit from Dickerson Station H to Ed's Ferry area to accommodate the new 500 kV circuit between Doubs and Aspen (the 500 kV portion of the work)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.09%) / Dominion (99.89%) / PEPCO (0.02%)
b3800.244	Rebuild 7.26 miles of existing 230 kV circuit from Dickerson Station H to Ed's Ferry area to accommodate the new 500 kV circuit between Doubs and Aspen (the 230 kV portion of the project)		APS (9.78%) / BGE (12.07%) / Dominion (51.18%) / PEPCO (26.97%)

*Neptune Regional Transmission System, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.245	Reconfigure Dickerson H 230 kV substation and upgrade terminal equipment		APS (9.78%) / BGE (12.07%) / Dominion (51.18%) / PEPCO (26.97%)
b4052.1	New 500/230 kV substation (Dickerson) by cutting into the Aspen - Rocky Point 500 kV line.		AEC (0.52%) / APS (27.68%) / BGE (22.04%) / ComEd (0.15%) / DPL (1.50%) / ME (2.68%) / PECO (1.91%) / PENELEC (0.01%) / PEPCO (42.65%) / PSEG (0.83%) / RE (0.03%)
b4052.2	Install two 500/230 kV transformers connecting a new 500 kV Dickerson station and Dickerson "H" 230 kV station including 230 kV substation work.		AEC (0.52%) / APS (27.68%) / BGE (22.04%) / ComEd (0.15%) / DPL (1.50%) / ME (2.68%) / PECO (1.91%) / PENELEC (0.01%) / PEPCO (42.65%) / PSEG (0.83%) / RE (0.03%)
b4052.3	Rocky Point - Dickerson (new 500 kV) termination work at Dickerson 500 kV.		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (1.64%) / Dominion (83.16%) / PEPCO (14.87%) / PPL (0.33%)

*Neptune Regional Transmission System, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4052.4	Aspen - Dickerson (new 500 kV) termination work at Dickerson 500 kV.		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (0.40%) / Dayton (0.11%) / Dominion (99.20%) / EKPC (0.29%)
b4052.7	Install 3.2% 230 kV series Reactor at Dickerson "H" terminal side of the Edwards Ferry - Dickerson line.		AEC (0.23%) / AEP (1.82%) / APS (4.76%) / ATSI (0.05%) / BGE (3.71%) / ComEd (0.08%) / Dayton (0.35%) / DEOK (0.95%) / DL (0.06%) / Dominion (77.57%) / DPL (0.49%) / EKPC (0.40%) / JCPL (0.29%) / ME (0.61%) / NEPTUNE* (0.03%) / OVEC (0.01%) / PECO (0.82%) / PENELEC (0.02%) / PEPCO (6.90%) / PPL (0.46%) / PSEG (0.38%) / RE (0.01%)
b4052.8	Relocate Dickerson "D"- Quince Orchard 23035 to terminate at Dickerson "H" at Dickerson No.2 Tie location.		AEC (0.77%) / ATSI (2.49%) / BGE (30.33%) / ComEd (0.08%) / DL (0.49%) / Dominion (0.01%) / DPL (2.16%) / JCPL (0.05%) / ME (0.39%) / NEPTUNE* (0.01%) / PECO (2.66%) / PEPCO (60.38%) / PSEG (0.17%) / RE (0.01%)

*Neptune Regional Transmission System, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4052.9	Replace two breakers, one bushing CT, one stranded bus conductor, four disconnect switches at Brighton 500 kV substation.		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.57%) / AEP (1.27%) / APS (0.10%) / ATSI (1.01%) / BGE (46.14%) / ComEd (0.32%) / Dayton (0.14%) / DEOK (0.32%) / DL (1.77%) / Dominion (7.34%) / DPL (6.94%) / EKPC (0.16%) / JCPL (0.61%) / NEPTUNE* (0.07%) / OVEC (0.01%) / PECO (8.89%) / PENELEC (0.09%) / PEPCO (21.96%) / PPL (0.13%) / PSEG (0.15%) / RE (0.01%)
b4052.10	Replace one stranded bus conductor, three thermal relays, two disconnect switches at Quince Orchard 230 kV substation.		AEC (0.76%) / ATSI (2.45%) / BGE (29.85%) / ComEd (0.08%) / DL (0.48%) / DPL (2.12%) / JCPL (0.04%) / ME (0.38%) / NEPTUNE* (0.01%) / PECO (2.63%) / PEPCO (61.03%) / PSEG (0.16%) / RE (0.01%)
b4052.11	Replace Bells Mill T3 transformer with new PEPCO standard 260 MVA 230/138 kV transformer.		AEC (0.05%) / BGE (0.80%) / DPL (0.27%) / EKPC (0.02%) / PECO (0.15%) / PEPCO (98.40%) / PPL (0.31%)

*Neptune Regional Transmission System, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.29	Uprate 500 kV Line #560 terminal equipment at Burches Hill substation in PEPCO so as not to limit the conductor rating. The scope includes upgrading/replacing two circuit breakers, four switches, and two different portions of stranded bus.		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.16%) / AEP (3.00%) / APS (4.93%) / ATSI (1.22%) / BGE (13.58%) / ComEd (0.47%) / Dayton (0.36%) / DEOK (0.93%) / DL (0.17%) / Dominion (28.08%) / DPL (0.74%) / EKPC (0.51%) / JCPL (1.09%) / ME (0.89%) / NEPTUNE* (0.12%) / OVEC (0.01%) / PECO (0.53%) / PENELEC (0.09%) / PEPCO (34.86%) / PPL (7.38%) / PSEG (0.85%) / RE (0.03%)

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(12) Public Service Electric and Gas Company

Required Transmission Enhancements		Annual Revenue Requirement	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%)

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)
b2276	Eliminate the Sewaren 138 kV bus by installing a new 230 kV bay at Sewaren 230 kV		PSEG (96.50%) / RE (3.50%)
b2276.1	Convert the two 138 kV circuits from Sewaren – Metuchen to 230 kV circuits including Lafayette and Woodbridge substation		PSEG (96.50%) / RE (3.50%)
b2276.2	Reconfigure the Metuchen 230 kV station to accommodate the two converted circuits		PSEG (96.50%) / RE (3.50%)
b2290	Replace disconnect switches at Kilmer, Lake Nilson and Greenbrook 230 kV substations on the Raritian River - Middlesex (I-1023) circuit		PSEG (100%)
b2291	Replace circuit switcher at Lake Nelson 230 kV substation on the Raritian River - Middlesex (W-1037) circuit		PSEG (100%)
b2295	Replace the Salem 500 kV breaker 10X with 63 kA breaker		PSEG (100%)
b2421	Install all 69 kV lines to interconnect Plainfield, Greenbrook, and Bridgewater stations and establish the 69 kV network		PSEG (100%)
b2421.1	Install two 18 MVAR capacitors at Plainfield and S. Second St substation		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2421.2	Install a second four (4) breaker 69 kV 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 (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PSEG (96.50%) / RE (3.50%)
b2436.21	Convert the Marion - Bayonne "L" 138 kV circuit to 345 kV and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PSEG (96.50%) / RE (3.50%)

*Neptune Regional Transmission System, LLC

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2436.22	Convert the Marion - Bayonne "C" 138 kV circuit to 345 kV and any associated substation upgrades	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PSEG (96.50%) / RE (3.50%)
b2436.33	Construct a new Bayway – Bayonne 345 kV circuit and any associated substation upgrades	PSEG (96.50%) / RE (3.50%)
b2436.34	Construct a new North Ave – Bayonne 345 kV circuit and any associated substation upgrades	PSEG (96.50%) / RE (3.50%)

*Neptune Regional Transmission System, LLC

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2436.50	Construct a new North Ave - Airport 345 kV circuit and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2436.60	Relocate the underground portion of North Ave - Linden "T" 138 kV circuit to Bayway, convert it to 345 kV, and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2436.70	Construct a new Airport - Bayway 345 kV circuit and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2436.81	Relocate the overhead portion of Linden - North Ave "T" 138 kV circuit to Bayway, convert it to 345 kV, and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PSEG (96.50%) / RE (3.50%)

*Neptune Regional Transmission System, LLC

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2436.83	Convert the Bayway - Linden "Z" 138 kV circuit to 345 kV and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PSEG (96.50%) / RE (3.50%)
b2436.84	Convert the Bayway – Linden "W" 138 kV circuit to 345 kV and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PSEG (96.50%) / RE (3.50%)

*Neptune Regional Transmission System, LLC

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2436.85	Convert the Bayway – Linden "M" 138 kV circuit to 345 kV and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: PSEG (96.50%) / RE (3.50%)
b2436.90	Relocate Farragut - Hudson "B" and "C" 345 kV circuits to Marion 345 kV and any associated substation upgrades		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			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%)

*Neptune Regional Transmission System, LLC

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2437.10	New Bergen 345/230 kV transformer and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2437.11	New Bergen 345/138 kV transformer #1 and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2437.20	New Bayway 345/138 kV transformer #1 and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2437.21	New Bayway 345/138 kV transformer #2 and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2437.30	New Linden 345/230 kV transformer and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2437.33	New Bayonne 345/69 kV transformer and any associated substation upgrades		PSEG (96.50%) / RE (3.50%)
b2438	Install two reactors at Tosco 230 kV		PSEG (100%)
b2439	Replace the Tosco 138 kV breaker 'CB1/2 (CBT)' with 63 kA		PSEG (100%)
b2474	Rebuild Athenia 138 kV to 80 kA		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%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2633.3	Install an SVC at New Freedom 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)
b2633.4	Add a new 500 kV bay at Hope Creek (Expansion of Hope Creek substation)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			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%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2633.5	Add a new 500/230 kV autotransformer at Hope Creek and a new Hope Creek 230 kV substation		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%)
b2633.8	Implement high speed relaying utilizing OPGW on Salem – Orchard 500 kV, Hope Creek – New Freedom 500 kV, New Freedom - Salem 500 kV, Hope Creek – Salem 500 kV, and New Freedom – Orchard 500 kV lines		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2633.91	Implement changes to the tap settings for the two Salem units' step up transformers		AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)
b2633.92	Implement changes to the tap settings for the Hope Creek unit's step up transformers		AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)
b2702	Install a 350 MVAR reactor at Roseland 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** PSEG (100%)
b2703	Install a 100 MVAR reactor at Bergen 230 kV		PSEG (100%)
b2704	Install a 150 MVAR reactor at Essex 230 kV		PSEG (100%)
b2705	Install a 200 MVAR reactor (variable) at Bergen 345 kV		PSEG (100%)
b2706	Install a 200 MVAR reactor (variable) at Bayway 345 kV		PSEG (100%)
b2707	Install a 100 MVAR reactor at Bayonne 345 kV		PSEG (100%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2712	Replace the Bergen 138 kV '40P'breaker with 80 kA breaker		PSEG (100%)
b2713	Replace the Bergen 138 kV '90P' breaker with 80 kA 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 (96.50%) / RE (3.50%)
b2810.1	Install second 230/69 kV transformer at Cedar Grove		PSEG (96.50%) / RE (3.50%)
b2810.2	Build a new 69 kV circuit from Cedar Grove to Great Notch		PSEG (96.50%) / RE (3.50%)
b2811	Build 69 kV circuit from Locust Street to Delair		PSEG (96.50%) / RE (3.50%)
b2812	Construct River Road to Tonnelle Avenue 69kV Circuit		PSEG (96.50%) / RE (3.50%)
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

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual 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 (19.05%) / PECO (40.42%) / PSEG (39.11%) / RE (1.42%)
b2835.2	Convert the R-1318 and Q-1317 (Edison - Metuchen) 138 kV circuits to one 230 kV circuit (Meadow Road - Pierson Ave)		AEC (17.54%) / PECO (37.20%) / PSEG (43.68%) / RE (1.58%)
b2835.3	Convert the R-1318 and Q-1317 (Edison - Metuchen) 138 kV circuits to one 230 kV circuit (Pierson Ave - Metuchen)		AEC (16.23%) / PECO (34.43%) / PSEG (47.61%) / RE (1.73%)
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 (5.38%) / NEPTUNE* (76.74%) / PECO (11.92%) / PSEG (5.75%) / RE (0.21%)
b2836.2	Convert the N-1340 and T-1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Hunterglen - Trenton)		AEC (0.12%) / NEPTUNE* (8.78%) / PECO (0.26%) / PSEG (87.66%) / RE (3.18%)
b2836.3	Convert the N-1340 and T-1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Brunswick - Devils Brook)		AEC (3.16%) / NEPTUNE* (89.27%) / PECO (6.92%) / PSEG (0.63%) / RE (0.02%)
b2836.4	Convert the N-1340 and T-1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Devils Brook - Trenton)		AEC (0.96%) / NEPTUNE* (16.42%) / PECO (2.10%) / PSEG (77.70%) / RE (2.82%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual 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)		AEC (0.01%) / NEPTUNE* (8.73%) / PSEG (88.06%) / RE (3.20%)
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* (7.02%) / PSEG (89.72%) / RE (3.26%)
b2837.3	Convert the N-1340 and T-1372/D-1330 (Brunswick - Trenton) 138 kV circuits to 230 kV circuits (Brunswick - Devils Brook)		NEPTUNE* (6.60%) / PSEG (90.13%) / RE (3.27%)
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* (5.62%) / PSEG (91.07%) / RE (3.31%)
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* (4.53%) / PSEG (92.13%) / RE (3.34%)
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)		AEC (0.03%) / NEPTUNE* (11.15%) / PSEG (85.71%) / RE (3.11%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual 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)		AEC (0.01%) / NEPTUNE* (8.32%) / PSEG (88.46%) / RE (3.21%)
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)		AEC (0.01%) / NEPTUNE* (8.32%) / PSEG (88.46%) / RE (3.21%)
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* (6.71%) / PSEG (90.02%) / RE (3.27%)
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* (6.05%) / PSEG (90.66%) / RE (3.29%)
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* (4.10%) / PSEG (92.54%) / RE (3.36%)
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		PSEG (96.50%) / RE (3.50%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2933.1	Construct a 230/69 kV station at Springfield		PSEG (96.50%) / RE (3.50%)
b2933.2	Construct a 230/69 kV station at Stanley Terrace		PSEG (96.50%) / RE (3.50%)
b2933.31	Construct a 69 kV network between Front Street, Springfield and Stanley Terrace (Front Street - Springfield)		PSEG (96.50%) / RE (3.50%)
b2933.32	Construct a 69 kV network between Front Street, Springfield and Stanley Terrace (Springfield – Stanley Terrace)		PSEG (96.50%) / RE (3.50%)
b2934	Build a new 69 kV line between Hasbrouck Heights and Carlstadt		PSEG (96.50%) / RE (3.50%)
b2935	Third Supply for Runnemede 69 kV and Woodbury 69 kV		PSEG (96.50%) / RE (3.50%)
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 (96.50%) / RE (3.50%)
b2935.2	Build a new line between Hilltop and Woodbury 69 kV providing the 3rd supply		PSEG (96.50%) / RE (3.50%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual 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 (96.50%) / RE (3.50%)
b2955	Wreck and rebuild the VFT – Warinanco – Aldene 230 kV circuit with paired conductor		PSEG (96.50%) / RE (3.50%)
b2956	Replace existing cable on Cedar Grove - Jackson Rd. with 5000 kcmil XLPE cable		PSEG (96.50%) / RE (3.50%)
b2982	Construct a 230/69 kV station at Hillsdale Substation and tie to Paramus and Dumont at 69 kV		PSEG (96.50%) / RE (3.50%)
b2982.1	Install a 69 kV ring bus and one (1) 230/69 kV transformer at Hillsdale		PSEG (96.50%) / RE (3.50%)
b2982.2	Construct a 69 kV network between Paramus, Dumont, and Hillsdale Substation using existing 69 kV circuits		PSEG (96.50%) / RE (3.50%)
b2983	Convert Kuller Road to a 69/13 kV station		PSEG (96.50%) / RE (3.50%)
b2983.1	Install 69 kV ring bus and two (2) 69/13 kV transformers at Kuller Road		PSEG (96.50%) / RE (3.50%)
b2983.2	Construct a 69 kV network between Kuller Road, Passaic, Paterson, and Harvey (new Clifton area switching station)		PSEG (96.50%) / RE (3.50%)
b2986	Replace the existing Roseland – Branchburg – Pleasant Valley 230 kV corridor with new structures		See sub-IDs for cost allocations

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2986.11	Roseland-Branchburg 230 kV corridor rebuild (Roseland - Readington)		PSEG (96.50%) / RE (3.50%)
b2986.12	Roseland-Branchburg 230 kV corridor rebuild (Readington - Branchburg)		JCPL (49.11%) / PSEG (49.11%) / RE (1.78%)
b2986.21	Branchburg-Pleasant Valley 230 kV corridor rebuild (Branchburg - East Flemington)		NEPTUNE* (1.61%) / PECO (93.16%) / PSEG (5.05%) / RE (0.18%)
b2986.22	Branchburg-Pleasant Valley 230 kV corridor rebuild (East Flemington - Pleasant Valley)		AEC (4.04%) / NEPTUNE* (14.95%) / PECO (25.30%) / PSEG (53.76%) / RE (1.95%)
b2986.23	Branchburg-Pleasant Valley 230 kV corridor rebuild (Pleasant Valley - Rocktown)		JCPL (26.74%) / NEPTUNE* (4.44%) / PECO (0.43%) / PSEG (66.00%) / RE (2.39%)
b2986.24	Branchburg-Pleasant Valley 230 kV corridor rebuild (the PSEG portion of Rocktown - Buckingham)		JCPL (31.10%) / NEPTUNE* (3.97%) / PECO (0.29%) / PSEG (62.38%) / RE (2.26%)
b3003	Construct a 230/69 kV station at Maywood		PSEG (96.50%) / RE (3.50%)
b3003.1	Purchase properties at Maywood to accommodate new construction		PSEG (96.50%) / RE (3.50%)
b3003.2	Extend Maywood 230 kV bus and install one (1) 230 kV breaker		PSEG (96.50%) / RE (3.50%)
b3003.3	Install one (1) 230/69 kV transformer at Maywood		PSEG (96.50%) / RE (3.50%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3003.4	Install Maywood 69 kV ring bus		PSEG (96.50%) / RE (3.50%)
b3003.5	Construct a 69 kV network between Spring Valley Road, Hasbrouck Heights, and Maywood		PSEG (96.50%) / RE (3.50%)
b3004	Construct a 230/69/13 kV station by tapping the Mercer – Kuser Rd 230 kV circuit		PSEG (96.50%) / RE (3.50%)
b3004.1	Install a new Clinton 230 kV ring bus with one (1) 230/69 kV transformer Mercer - Kuser Rd 230 kV circuit		PSEG (96.50%) / RE (3.50%)
b3004.2	Expand existing 69 kV ring bus at Clinton Ave with two (2) additional 69 kV breakers		PSEG (96.50%) / RE (3.50%)
b3004.3	Install two (2) 69/13 kV transformers at Clinton Ave		PSEG (96.50%) / RE (3.50%)
b3004.4	Install 18 MVAR capacitor bank at Clinton Ave 69 kV		PSEG (96.50%) / RE (3.50%)
b3025	Construct two (2) new 69/13 kV stations in the Doremus area and relocate the Doremus load to the new stations		PSEG (96.50%) / RE (3.50%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3025.1	Install a new 69/13 kV station (Vauxhall) with a ring bus configuration		PSEG (96.50%) / RE (3.50%)
b3025.2	Install a new 69/13 kV station (19th Ave) with a ring bus configuration		PSEG (96.50%) / RE (3.50%)
b3025.3	Construct a 69 kV network between Stanley Terrace, Springfield Road, McCarter, Federal Square, and the two new stations (Vauxhall & 19th Ave)		PSEG (96.50%) / RE (3.50%)
b3703	Construct a third 69 kV supply line from Penns Neck substation to West Windsor substation		PSEG (100%)
b3704	Replace the Lawrence switching station 230/69 kV Transformer No. 220-4 and its associated circuit switchers with a new larger capacity transformer with load tap changer (LTC) and new dead tank circuit breaker. Install a new 230 kV gas insulated breaker, associated disconnects, overhead bus and other necessary equipment to complete the bay within the Lawrence 230 kV switchyard		PSEG (96.50%) / RE (3.50%)
b3705	Replace existing 230/138 kV Athenia Transformer No. 220-1		PSEG (96.50%) / RE (3.50%)
b3706	Replace Fair Lawn 230/138 kV transformer No. 220-1 with an existing O&M system spare at Burlington		PSEG (100%)
b3716	Construct a third 69 kV supply line from Totowa substation to the customer's substation		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3719	Replace the two existing 1200A Bergen 138 kV circuit switchers with two 138 kV disconnect switches to achieve a minimum summer normal device rating of 298 MVA and a minimum summer emergency rating of 454 MVA		PSEG (100%)
b3757	Convert existing Medford 69 kV straight bus to seven-breaker ring bus, construct a new 230/69 kV transformer at Cox's Corner station and a new 69 kV line from Cox's Corner station to Medford station		PSEG (100%)
b3794.1	Replace existing Waldwick 230 kV 50 MVAR fixed shunt reactor with a 230 kV 150 MVAR variable shunt reactor		PSEG (100%)
b3794.2	Replace existing Waldwick 345 kV 100 MVAR fixed shunt reactor with a 345 kV 150 MVAR variable shunt reactor		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3848.1	Open East Rutherford 69 kV tie breaker (26K)		PSEG (100%)
b3848.2	Move line U-775 (East Rutherford to Hasbrouck Heights) currently on section 2 to section 7 of the ring bus		PSEG (100%)
b3849.1	Perform all necessary engineering design and evaluation to increase Fairlawn 69 kV GIS from 50 kA to 55 kA		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3855.1	Build 4 miles new 230 kV XLPE Circuit using (345 kV rated 5000kcmil cable) from Jackson Road 230 kV station to Cedar Grove 230 kV station		PSEG (95.85%) / RE (4.15%)
b3855.2	Expand a new 230 kV bay at the existing Cedar Grove station with one line position by adding two 230 kV circuit breakers and associated disconnect switches		PSEG (95.85%) / RE (4.15%)
b3855.3	Replace the existing HPFF termination structure with a new XLPE termination structure to connect to spare GIS bay position at Jackson 230 kV station		PSEG (95.85%) / RE (4.15%)
b3868.1	Cut existing Carlstadt to River Road 69 kV line and extend Carlstadt line side to Penhorn 69 kV. Extend the other end of the line by constructing a new portion and connecting it to Kingsland 69 kV switch.		PSEG (100%)
b3868.2	Extend the other end of L-636 to Kingsland switch by constructing new 5.5 miles portion utilizing existing I-2314 Transmission towers from H-A 5/4 to H-A 2/3. New 69kV line to be routed along County Ave pass Secaucus Rd in Secaucus NJ.		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3868.3	Reconfigure former River Road to Carlstadt 69 kV and Tonnelle Ave to Union City 69 kV lines at the intersection Tonnelle Ave and Granton Ave in North Bergen, NJ by connecting Union City to River Road and Tonnelle Ave to Kingsland.		PSEG (100%)
b3869.1	Relocate the Bergen Gen No. 1 point of interconnection from Bergen 138 kV to Bergen 345 kV GIS through the existing 345/138 kV transformer		PSEG (100%)
b3869.2	Remove and retire the two (2) existing Bergen 138 kV series reactors and associated ancillary equipment		PSEG (100%)
b3869.3	Replace the two Bergen 138 kV series reactors with two new dry type 138 kV series reactors		PSEG (100%)
b3939.1	2024W1 PSEG P5 Solution #1 - Battery monitoring upgrades at PSEG substation. Addresses the following flowgate:2024-P5-PSEG01		PSEG (100%)
b3939.2	2024W1 PSEG P5 Solution #2 - Battery monitoring upgrades at PSEG substation. Addresses the following flowgate:2024-P5-PSEG02		PSEG (100%)
b3939.3	2024W1 PSEG P5 Solution #3 - Battery monitoring upgrades at PSEG substation. Addresses the following flowgate:2024-P5-PSEG03		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3939.4	2024W1 PSEG P5 Solution #4 - Battery monitoring upgrades at PSEG substation. Addresses the following flowgate:2024-P5DYN-PSEG01		PSEG (100%)
b3939.5	2024W1 PSEG P5 Solution #5 - Battery monitoring upgrades at PSEG substation. Addresses the following flowgate:2024-P5DYN-PSEG02		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4005.1	Replace the existing 1590 ACSR single conductor on the Roseland to Livingston 230 kV line with a 1590 ACSS single conductor		AEC (1.33%) / AEP (0.01%) / APS (0.16%) / ATSI (0.01%) / BGE (0.02%) / ComEd (0.05%) / Dominion (0.04%) / DPL (0.57%) / JCPL (0.18%) / ME (0.35%) / NEPTUNE* (0.01%) / PECO (1.04%) / PENELEC (0.06%) / PEPCO (0.01%) / PPL (0.01%) / PSEG (92.78%) / RE (3.37%)
b4005.2	Replace the existing 1590 ACSR single conductor on the Roseland to Laurel Ave 230 kV line with a 1590 ACSS single conductor		AEC (1.46%) / AEP (0.01%) / APS (0.16%) / ATSI (0.01%) / BGE (0.04%) / ComEd (0.06%) / DL (0.01%) / Dominion (0.09%) / DPL (0.62%) / JCPL (0.39%) / ME (0.39%) / NEPTUNE* (0.03%) / PECO (1.13%) / PENELEC (0.07%) / PEPCO (0.03%) / PPL (0.02%) / PSEG (92.14%) / RE (3.34%)
b4019.1	Replace/update riser structure, pot head, cable and sweeps as required to accept high-capacity conductor at Rahway 69 kV. Rebuild duct banks as needed		PSEG (100%)
b4019.2	Replace/update riser structure, pot head, cable and sweeps as required to accept high-capacity conductor at Roselle 69 kV		PSEG (100%)

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Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4019.3	Reconductor 69 kV line from Rahway to Roselle Station. High-capacity conductor to be rated at least 1100 Summer Normal and 1200 Summer Emergency		PSEG (100%)
b4020.1	Replace/update pole riser, pot head riser, associated sweeps and cable as required to accept high-capacity conductor at Gloucester 230 kV. Replace LP41K relays with new primary SEL-311L and backup SEL-411L relays.		PSEG (100%)
b4020.2	Replace existing OH wire with high-capacity conductor at Nicholson 230 kV. Replace LP10K relays with new primary SEL-311L and backup SEL-411L relays.		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4020.3	Wreck and Rebuild OH circuit including transfer of any underbuilt circuits below the 69 kV. Install shield wire. Install fiber and all necessary fiber accessories. Install high-capacity conductor from Gloucester to Nicholson. Minimum Ratings: Summer Normal -1100 amps (131MVA).		PSEG (100%)
b4021.1	Upgrade the Pfisterer connection inside of Prospect Park to accept new high-capacity cable; modify conduit as needed		PSEG (100%)
b4021.2	Upgrade the Pfisterer connection inside of North Paterson to accept new high-capacity cable; reconfigure duct banks in North Paterson to accommodate new high-capacity cable		PSEG (100%)
b4021.3	Reconductor 69 kV line from Prospect Park to North Paterson with a high-capacity conductor, including installing new composite poles and manholes along the line as required		PSEG (100%)

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4032.4	PSEG 500 kV transmission line work: Loop the Roseland-Hopatcong 500 kV line into JCPL Montville substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.90%) / APS (0.29%) / ComEd (0.02%) / DPL (0.67%) / JCPL (28.46%) / ME (0.80%) / NEPTUNE* (2.58%) / PENELEC (0.46%) / PSEG (62.55%) / RE (2.27%)

* Neptune Regional Transmission System, LLC

Public Service Electric and Gas Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4032.5	500 kV terminal upgrade at Hopatcong and Roseland-Loop the Roseland-Hopatcong 500 kV line into Montville substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.90%) / APS (0.29%) / ComEd (0.02%) / DPL (0.67%) / JCPL (28.46%) / ME (0.80%) / NEPTUNE* (2.58%) / PENELEC (0.46%) / PSEG (62.55%) / RE (2.27%)
b4032.6	PSEG 230 kV transmission line work: Rework PSEG 230 kV lines into JCPL Montville substation		APS (0.47%) / ATSI (0.08%) / ComEd (0.06%) / DPL (1.66%) / NEPTUNE* (4.43%) / PECO (5.28%) / PENELEC (0.51%) / PSEG (84.45%) / RE (3.06%)

* Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(14) Monongahela Power Company and The Potomac Edison Company, doing business as Allegheny Power

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2117	Reconductor 0.33 miles of the Parkersburg - Belpre line and upgrade Parkersburg terminal equipment		APS (100%)
b2118	Add 44 MVAR Cap at New Martinsville		APS (100%)
b2142	Replace Weirton 138 kV breaker “Wylie Ridge 210” with 63 kA breaker		APS (100%)
b2143	Replace Weirton 138 kV breaker “Wylie Ridge 216” with 63 kA breaker		APS (100%)
b2214	Albright Substation: Install a new control building in the switchyard and relocate controls and SCADA equipment from the generating station building the new control center		APS (100%)
b2215	Rivesville Switching Station: Relocate controls and SCADA equipment from the generating station building to new control building		APS (100%)

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

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

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2433.1	Install breaker and a half 138 kV substation (Waldo Run) with 4 breakers to accommodate service to MarkWest Sherwood Facility including metering which is cut into Glen Falls Lamberton 138 kV line		APS (100%)
b2433.2	Install a 70 MVAR SVC at the new WaldoRun 138 kV substation		APS (100%)
b2433.3	Install two 31.7 MVAR capacitors at the new WaldoRun 138 kV substation		APS (100%)
b2424	Replace the Weirton 138 kV breaker 'WYLIE RID210' with 63 kA breakers		APS (100%)
b2425	Replace the Weirton 138 kV breaker 'WYLIE RID216' with 63 kA breakers		APS (100%)

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

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

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2545.2	Install a ring bus station with five active positions and two 52.8 MVAR capacitors with 0.941 mH reactors		APS (100%)
b2545.3	Install a +90/-30 MVAR SVC protected by a 138 kV breaker		APS (100%)
b2545.4	Remove the 31.7 MVAR capacitor bank at Mobley 138 kV		APS (100%)
b2609.5	Terminate the Powell Mountain and Goff Run lines into the new Chloe substation and perform any associated relay upgrades or modifications required at Powell Mountain and Goff run to accommodate new		APS (100%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2672	Change CT Ratio at Seneca Caverns from 120/1 to 160/1 and adjust relay settings accordingly		APS (100%)
b2688.3	Carroll Substation: Replace the Germantown 138 kV wave trap, upgrade the bus conductor and adjust CT ratios		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%)
b2700	Remove existing Black Oak SPS		APS (100%)
b2743.6	Reconfigure the Ringgold 230 kV substation to double bus double breaker scheme		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%)

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

Required Transmission 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%)
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%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2965	Reconductor the Charleroi – Allenport 138 kV line with 954 ACSR conductor. Replace breaker risers at Charleroi and Allenport		APS (35.67%) / DL (64.33%)
b2970	Ringgold – Catoctin Solution		APS (100%)
b2970.1	Install two new 230 kV positions at Ringgold for 230/138 kV transformers		APS (100%)
b2970.2	Install new 230 kV position for Ringgold – Catoctin 230 kV line		APS (100%)
b2970.3	Install one new 230 kV breaker at Catoctin substation		APS (100%)
b2970.4	Install new 230/138 kV transformer at Catoctin substation. Convert Ringgold – Catoctin 138 kV line to 230 kV operation		APS (100%)

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

Required Transmission Enhancements		Annual 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 kV substation		See sub-IDs for cost 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%)

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

Required Transmission Enhancements	Annual Revenue Requirement		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%)
b3006	Replace four Yukon 500/138 kV transformers with three transformers with higher rating and reconfigure 500 kV bus		APS (66.42%) / DL (33.58%)
b3011.2	Upgrade terminal equipment at Yukon to increase rating on Yukon to Charleroi #2 138 kV line (New Yukon to Route 51 #4 138 kV line)		APS (28.79%) / DL (71.21%)
b3011.5	Upgrade terminal equipment at Yukon to increase rating on Yukon to Route 51 #3 138 kV line		APS (28.79%) / DL (71.21%)
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%)
b3079	Replace the Wylie Ridge 500/345 kV transformer #7		ATSI (72.30%) / DL (27.70%)
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%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3128	Relocate 34.5 kV lines from generating station roof R. Paul Smith 138 kV station		APS (100%)
b3214.1	Reconductor the Yukon – Smithton – Shepler Hill Jct 138 kV Line. Upgrade terminal equipment at Yukon and replace line relaying at Mitchell and Charleroi		APS (19.08%) / DL (80.92%)
b3214.2	Reconductor the Smithton – Shepler Hill Jct 138 kV Line		APS (11.84%) / DL (88.16%)
b3240	Upgrade Cherry Run and Morgan terminals to make the transmission line the limiting component		APS (100%)
b3241	Install 138 kV, 36 MVAR capacitor and a 5 uF reactor protected by a 138 kV capacitor switcher. Install a breaker on the 138 kV Junction terminal. Install a 138 kV 3.5 uF reactor on the existing Hardy 138 kV capacitor		APS (100%)
b3242	Reconfigure Stonewall 138 kV substation from its current configuration to a six-breaker, breaker-and-a-half layout and add two (2) 36 MVAR capacitors with capacitor switchers		APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3683	Reconductor the existing 556.5 ACSR line segments on the Messick Road – Ridgeley 138 kV line with 954 45/7 ACSR to achieve 308/376 MVA SN/SE and 349/445 MVA WN/WE ratings. Replace the remote end equipment for the line. The total length of the line is 5.02 miles	APS (100%)
b3701	Replace terminal equipment at French's Mill and Junction 138 kV substations	APS (100%)
b3717.1	Install a series reactor on Cheswick - Springdale 138 kV line	APS (8.02%) / DL (91.98%)
b3717.3	Relay work at Springdale 138 kV station	APS (100%)
b3717.4	Transmission line work – a new transmission structure and necessary tower work to handle the change in tension at Cheswick 138 kV station	APS (100%)
b3726	Install two new 500 kV breakers on the existing open SVC string to create a new bay position. Relocate & reterminate facilities as necessary to move the 500 kV SVC into the new bay position and install a 500 kV breaker on the 500/138 kV #3 transformer. Upgrade relaying at Black Oak substation	APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3743	At Bedington substation: Replace substation conductor, wave trap, Current Transformers (CT's) and upgrade relaying At Cherry Run substation: Replace substation conductor, wave trap, CT's, disconnect switches, circuit breaker and upgrade relaying At Marlowe substation: Replace substation conductor, wave trap, CT's and upgrade relaying	APS (100%)
b3746	Install redundant relaying at Meadow Brook 500 kV substation	APS (100%)
b3747	Install redundant relaying at Bedington 500 kV substation	APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3772	Reconductor 27.3 miles of the Messick Road – Morgan 138 kV line from 556 ACSR to 954 ACSR. At Messick Road substation, replace 138 kV wave trap, circuit breaker, CT's, disconnect switch, and substation conductor and upgrade relaying. At Morgan substation, upgrade relaying		APS (100%)
b3781	Replace line drops to Doubs Transformer 3. New transformer rating: 721 MVA SN / 862 MVA SE		APS (100%)
b3782	Adjust relay settings at Riverton substation on the Riverton-Bethel Tap 138 kV line		APS (100%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3796.0	Replace the Belmont 765/500 kV transformer No. 5 with a new transformer bank consisting of three single-phase transformers and an additional single phase spare transformer. The project will also replace 500 kV disconnect switches at the Belmont substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (0.28%) / APS (0.15%) / Dayton (0.10%) / DEOK (0.18%) / DL (6.57%) / Dominion (92.68%) / EKPC (0.04%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.8	Reconfigure Doubs 500 kV station and upgrade terminal equipment to new line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.16%) / BGE (0.79%) / Dominion (74.28%) / DPL (0.41%) / PECO (0.77%) / PEPCO (10.59%)
b3800.9	Rebuild the existing Hunterstown - Carroll 115/138 kV Corridor as double circuit using 230 kV construction standards. New circuit will be operated at 230 kV. Existing circuit to remain at 115/138 kV		This upgrade ID is only for tracking purpose. Cost allocation details are available from b3800.10 ~ b3800.18

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.13	Rebuild the Germantown - Carroll 138 kV line to 230 kV double circuit construction (APS - PE Section)		APS (82.49%) / ME (17.51%)
b3800.15	Construct new 230 kV Hunterstown - Carroll line (APS - PE Section)		APS (99.86%) / ME (0.14%)
b3800.16	Expand Carroll 230 kV substation to ring bus		APS (99.86%) / ME (0.14%)
b3800.17	Network upgrade at Carroll 230 kV substation		APS (99.86%) / ME (0.14%)
b3800.20	Fayetteville - Grand Point 138 kV - Replace line trap at Grand Point 138 kV station		APS (100%)
b3800.21	Reid - Ringgold 138 kV line - Replace line trap, substation conductor, breaker, relaying and CTs at Ringgold station		APS (100%)
b3800.25	Taneytown 138 kV substation terminal upgrade		APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.101	502 Junction substation two 500 kV circuit breaker expansion	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (25.59%) / BGE (9.79%) / Dominion (51.94%) / PEPCO (12.68%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.103	Rebuild approximately 16 miles of the Gore - Stonewall 138 kV line with 500 kV overbuild (502 Junction to Woodside 500 kV line section)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (25.59%) / BGE (9.79%) / Dominion (51.94%) / PEPCO (12.68%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.104	Rebuild approximately 15 miles of the Stonewall - Millville 138 kV line with 500 kV overbuild (502 Junction to Woodside 500 kV line section)	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.18%) / BGE (7.21%) / Dominion (72.52%) / PEPCO (11.09%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.105	Rebuild approximately 6 miles of the Millville - Doubs 138 kV line with 500 kV overbuild (502 Junction to Woodside 500 kV line section)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.18%) / BGE (7.21%) / Dominion (72.52%) / PEPCO (11.09%)
b3800.111	Construct the Woodside - Stonewall 138 kV No. 1 line		APS (100%)
b3800.112	Construct the Woodside - Stonewall 138 kV No. 2 line		APS (100%)
b3800.114	Stonewall 138 kV substation two 138 kV breaker expansion		APS (100%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.116	Line work for terminating Doubs to Bismark line for Doubs side at Woodside 500 kV substation (FE Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (27.49%) / BGE (9.83%) / Dominion (53.78%) / PEPCO (8.90%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.122	Rebuild 500 kV line No. 514 from Doubs - Goose Creek 500 kV line. The Doubs - Goose Creek 500 kV line will be rebuilt and the Doubs - Dickerson 230 kV will be relocated and underbuilt on the same structure		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.08%) / Dominion (99.90%) / PEPCO (0.02%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.123 Doubs substation work - Re-terminate the rebuilt Doubs - Goose Creek 500 kV line in its existing bay, terminate the new Doubs - Aspen 500 kV line in the open bay at Doubs, Replace three 500 kV breakers, Replace 500 kV terminal equipment including disconnect switches, CTs and substation conductor & Replace relaying (APS Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.08%) / Dominion (99.90%) / PEPCO (0.02%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.124	New Doubs to Aspen 500 kV line (APS Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.08%) / Dominion (99.90%) / PEPCO (0.02%)
b3800.125	Rebuild the Doubs - Dickerson 230 kV line. This will be underbuilt on the new Doubs - Goose Creek 500 kV line (APS Portion)		PEPCO (100%)
b3800.126	Rebuild the Doubs - Aqueduct 230 kV line. This will be underbuilt on the new Doubs - Aspen 500 kV line (APS Portion)		PEPCO (100%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.127	Rebuild the Dickerson - Aqueduct 230 kV line. This will be underbuilt on the new Doubs - Aspen 500 kV line (APS Portion)	PEPCO (100%)
b3800.128	Construct new Woodside – Goose Creek 500 kV line for approximately 15 miles on single circuit monopole structures within the Doubs – Goose Creek Corridor. (FE Portion)	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.26%) / BGE (7.30%) / Dominion (72.31%) / PEPCO (11.13%)
b3800.129	Construct 500 kV line from existing structure MVF1-101 on the Doubs – Millville 138 kV line around Doubs substation and into the entrance of the Doubs – Goose Creek corridor. (Approximately 2 miles)	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.26%) / BGE (7.30%) / Dominion (72.31%) / PEPCO (11.13%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.413	Replace Double Toll Gate 138 kV breaker MDT 138 OCB with a breaker rated 40 kA		APS (100%)
b3800.414	Replace Doubs 500 kV breaker DL-55 522LIN with a breaker rated 60 kA		APS (100%)
b3976.1	At Bedington: - Install foundation, conduit and grounding for new equipment. - Install three 138 kV surge arresters. - Replace one existing 138 kV CVT with three 138 kV CVTs. - Replace one lot of limiting conductor. - Install one lot of cables and grounding. - Replace one existing 138 kV Eagle line terminal relay panel and breaker failure, with one standard line relaying panel consisting of one SEL-421, one SEL-411L and one SEL-451		APS (100%)
b3977.1	At Meadow Brook: - Install conduit and grounding for new equipment. - Install one lot of cables and grounding for new equipment. - Replace one 138 kV wave trap on the West Winchester line terminal		APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3983.2	Belmont substation – Replace B-8 138 kV circuit breaker with a 63 kA, 3000A breaker. This will not affect the line ratings of the Belmont-Trissler 138 kV 604 line, which is currently rated at 176/229 SN/SE or the Belmont-Edgelawn 138 kV line, which is currently rated at 292/314 SN/SE	APS (100%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.11	Expand Black Oak Substation to accommodate the connection of the 502 Jct-Woodside 500 kV line and loop the 502 Jct-Woodside 500 kV line into the Black Oak substation by constructing ~0.85 miles of new 500 kV line into and out of Black Oak 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (8.93%) / BGE (13.63%) / Dominion (61.66%) / PEPCO (15.78%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.12	Upgrade the terminal equipment on the Doubs No. 1 500/230 kV transformer.		APS (74.10%) / PEPCO (25.90%)
b4000.13	Terminate the Woodside - Goose Creek 500 kV line into Doubs Substation, creating the Woodside - Doubs #2 500 kV Line. Remove the Chanceford-Doubs and Rocky Point-Doubs line terminations at the Doubs substation and connects the two lines through a 0.6 mile 500 kV bypass line around the Doubs substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** AEC (0.20%) / APS (0.06%) / BGE (0.71%) / Dominion (89.06%) / DPL (0.36%) / JCPL (0.33%) / ME (0.15%) / NEPTUNE* (0.03%) / PECO (0.73%) / PEPCO (7.93%) / PSEG (0.42%) / RE (0.02%)
b4000.110	Doubs Sub 500 kV - replace 50 kA breaker DL-59 No. 2CAP with 63 kA		APS (100%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4001.1	Construct the McCanns Rd. 138 kV switching station and interconnect the existing Redbud-West Winchester 138 kV line and Bartonville-Stephenson 138 kV line		AEP (0.57%) / APS (99.13%) / ATSI (0.01%) / BGE (0.01%) / Dominion (0.04%) / EKPC (0.21%) / PECO (0.01%) / PPL (0.01%) / PSEG (0.01%)
b4001.2	Reconductor new Redbud McCanns Rd. 138 kV line with 795 kcmil 45/7 ACSS for 0.5 miles from Redbud 138 kV substation to Str. 175 of the existing Redbud-West Winchester 138 kV line at approximate coordinates (39.217478, -78.128621)		AEP (0.57%) / APS (99.13%) / ATSI (0.01%) / BGE (0.01%) / Dominion (0.04%) / EKPC (0.21%) / PECO (0.01%) / PPL (0.01%) / PSEG (0.01%)
b4002.1	Rebuild approximately 1.9 miles of 115 kV line with larger conductor. -Install OPGW for the static. -Install one new SCADA-controlled 2000A disconnect with whips		AEC (2.49%) / AEP (0.95%) / APS (5.63%) / ATSI (16.98%) / BGE (0.94%) / ComEd (1.50%) / Dayton (0.33%) / DEOK (0.59%) / DL (0.06%) / Dominion (24.05%) / DPL (0.21%) / EKPC (0.56%) / JCPL (3.22%) / ME (4.42%) / NEPTUNE* (0.35%) / OVEC (0.02%) / PECO (7.48%) / PENELEC (16.66%) / PEPCO (5.40%) / PPL (4.25%) / PSEG (3.77%) / RE (0.14%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4002.2	Adjust the relay settings at Penn Mar, Garrett and Deep Creek substations to accommodate the new ratings and impedance changes associates with the Garrett-Garrett tap 115 kV line rebuild		AEC (2.49%) / AEP (0.95%) / APS (5.63%) / ATSI (16.98%) / BGE (0.94%) / ComEd (1.50%) / Dayton (0.33%) / DEOK (0.59%) / DL (0.06%) / Dominion (24.05%) / DPL (0.21%) / EKPC (0.56%) / JCPL (3.22%) / ME (4.42%) / NEPTUNE* (0.35%) / OVEC (0.02%) / PECO (7.48%) / PENELEC (16.66%) / PEPCO (5.40%) / PPL (4.25%) / PSEG (3.77%) / RE (0.14%)

*Neptune Regional Transmission System, LLC

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4037.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5-APS25	APS (100%)
b4038.1	2024W1 P5: Modify relay wiring: Addressing FG No. 2024-P5-APS02	APS (100%)
b4039.1	2024W1 P5: Replace 3 relay panels & modify relay wiring. Addresses FG No. 2024-P5-APS24	APS (100%)
b4039.2	2024W1 P5: Replace 1 relay panel at a confidential substation connected to the substation associated with b4039.1. Addresses FG No. 2024-P5-APS24	APS (100%)
b4039.3	2024W1 P5: Replace 1 relay panel at a confidential substation connected to the substation associated with b4039.1. Addresses FG No. 2024-P5-APS24	APS (100%)
b4039.4	2024W1 P5: Replace 1 relay panel at a confidential substation connected to the substation associated with b4039.1. Addresses FG No. 2024-P5-APS24	APS (100%)
b4040.1	2024W1 P5: Install battery monitoring, DC panel, and modify relay wiring: Addressing FG No. 2024-P5-APS03	APS (100%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4057.1	2024W1 P5: Install relay panel and modify relay wiring: Addressing FG No. 2024-P5-APS06		APS (100%)
b4060.1	2024W1 P5: Install open battery monitoring, install relay panel, modify relay wiring: Addressing FG No. 2024-P5-APS01		APS (100%)
b4061.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5-APS05		APS (100%)
b4062.1	2024W1 P5: Install open battery monitoring & modify relay wiring: Addressing FG No. 2024-P5-APS08		APS (100%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4063.1	2024W1 P5: Install battery monitoring, DC panel(s), replace bus differential scheme, and modify relay wiring: Addressing FG No. 2024-P5-APS22		APS (100%)
b4064.1	2024W1 P5: Install battery monitoring, relay panels, and modify relay wiring: Addressing FG No. 2024-P5-APS23		APS (100%)

SCHEDULE 12 – APPENDIX A

(15) Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc.

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2141.1	Remove Byron SPS upon completion of Byron - Wayne 345 kV		ComEd (100%)
b2365	Replace 138 kV bus tie 1-2 circuit breaker, station conductor, relays, and a wave trap at TSS 55 Hegewisch substation		ComEd (100%)
b2366	Reconductor 1.4 miles of 138 kV line 0112, Kickapoo Creek - LaSalle County 138kV line		ComEd (100%)
b2415	Install a 138 kV Red Blue bus tie with underground cable and a line 15913 CB at Highland Park		ComEd (100%)
b2416	Reconductor 0.125 miles of the East Frankfort - Mokena 138 kV line L6604		ComEd (100%)
b2417	Replace Ridgeland 138 kV bus tie CB and underground cable at TSS 192 Ridgeland 138 kV substation		ComEd (100%)
b2418	Reconductor 7.5 miles of Waukegan - Gurnee 138 kV line L1607		ComEd (100%)
b2419	Reconductor 0.33 miles of 138 kV underground cable on the Sawyer - Crawford 138 kV Blue line (L1324)		ComEd (100%)
b2465	Replace the Skokie 138 kV breaker ’88 L8809’ with a 63 kA breaker		ComEd (100%)
b2466	Replace the Skokie 138 kV breaker ’88 L8810’ with 63kA breaker		ComEd (100%)
b2467	Replace the Skokie 138 kV breaker ’88 L11416’ with 63 kA breaker		ComEd (100%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2468	Replace the Skokie 138 kV breaker '88 L8803' with 63kA breaker		ComEd (100%)
b2469	Replace the Des Plaines 138 kV breaker '46 11702' with 63 kA breaker		ComEd (100%)
b2561	Install a new 345 kV circuit breaker 5-7 at Elwood substation		ComEd (100%)
b2562	Remove 2.0 miles of wood poles on 138 kV line 17105, erect new steel structures, and install new 1113 kcmil ACSR conductor from Roscoe Bert to Harlem		ComEd (100%)
b2613	Replace relays at Mazon substation		ComEd (100%)
b2692.1	Replace station equipment at Nelson, ESS H-471 and Quad Cities		AEC (0.18%) / AEP (18.68%) / APS (5.86%) / ATSI (7.85%) / BGE (3.32%) / ComEd (38.21%) / Dayton (2.76%) / DEOK (4.13%) / DL (2.23%) / Dominion (5.15%) / DPL (1.97%) / EKPC (1.36%) / HTP (0.05%) / JCPL (0.52%) / MetED (0.04%) / Neptune (0.04%) / PECO (1.08%) / PENELEC (1.25%) / PEPCO (3.56%) / PPL (0.45%) / PSEG (1.17%) / RECO (0.14%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2692.2	Upgrade conductor ratings of Cordova – Nelson, Quad Cities – ESS H-471 and ESS H-471 – Nelson 345 kV lines and mitigating sag limitations		AEC (0.18%) / AEP (18.68%) / APS (5.86%) / ATSI (7.85%) / BGE (3.32%) / ComEd (38.21%) / Dayton (2.76%) / DEOK (4.13%) / DL (2.23%) / Dominion (5.15%) / DPL (1.97%) / EKPC (1.36%) / HTP (0.05%) / JCPL (0.52%) / MetED (0.04%) / Neptune (0.04%) / PECO (1.08%) / PENELEC (1.25%) / PEPCO (3.56%) / PPL (0.45%) / PSEG (1.17%) / RECO (0.14%)
b2693	Replace L7815 B phase line trap at Wayne substation		ComEd (100%)
b2699.1	Replace 5 Powerton 345 kV CB's with 2 cycle IPO breakers, install one new 345 kV CB; swap line 0302 and line 0303 bus positions; reconfigure Powerton 345 kV bus as single ring configuration		ComEd (100%)
b2699.2	Remove SPS logic at Powerton that trips generators or sectionalizes bus under normal conditions; minimal SPS logic will remain		ComEd (100%)
b2721	Goodings Grove – Balance Station Load (swap bus positions for 345 kV lines 1312 & 11620 and 345 kV lines 11604 & 11622) and replace 138 kV bus tie 2-3		ComEd (100%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2728	Mitigate sag limitations on Loretto – Wilton Center 345 kV Line and replace station conductor at Wilton Center		ATSI (3.43%) / AEP (3.34%) / ComEd (92.02%) / DLCO (1.21%)
b2732.1	Cut-in of line 93505 Tazewell – Kendall 345 kV line into Dresden		ComEd (100%)
b2732.2	Raise towers to remove the sag limitations on Pontiac – Loretto 345 kV line		ComEd (100%)
b2751	Rebuild/Resag the H440 - H440 Tap 138 kV line 16914-2 (Hays Road - SW 1403 138 kV)		ComEd (100%)
b2930	Upgrade capacity on E. Frankfort – University Park 345 kV		ComEd (100%)
b2931	Upgrade substation equipment at Pontiac Midpoint station to increase capacity on Pontiac – Brokaw 345 kV line		ComEd (100%)
b2941	Build an indoor new Elk Grove 138 kV GIS substation at the point where Rolling Meadows & Schaumburg tap off from the main lines, between Landmeier and Busse. The four 345 kV circuits in the ROW will be diverted into Gas Insulated Bus (GIB) and go through the basement of the building to provide clearance for the above ground portion of the building		ComEd (100%)
b2959	Install a new 138 kV circuit 18702 from Schauff Road to Rock Falls and install a fourth breaker and a half run at Schauff Road		ComEd (100%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2995	Remove Davis Creek RAS		ComEd (100%)
b2997	Remove University Park North RAS		ComEd (100%)
b2998	Install a 120 MVAR 345 kV shunt inductor at Powerton (the 345 kV yard already contains an empty bus position on the ring we only need a switching breaker for the inductor)		ComEd (100%)
b2999	Rebuild the 12.36 mile Schauff Road to Nelson tap 138 kV line L15508		ComEd (100%)
b3049	Replace 345 kV breaker at Joliet substation		ComEd (100%)
b3111	Install high-speed backup clearing scheme on the E. Frankfort – Matteson 138 kV line (L6603)		ComEd (100%)
b3147	Modify 138 kV blue bus total clearing times at TSS 111 Electric Junction to eleven (11) cycles for fault on 345/138 kV Transformer 81, and to thirteen (13) cycles for faults on 138 kV Line #11106, 138 kV Line #11102 and 345/138 kV Transformer 82		ComEd (100%)
b3317	Modify backup relay clearing times at the 138 kV STA16 Waukegan station		ComEd (100%)
b3677	Rebuild a 13 mile section of 138 kV line between LaSalle and Mazon stations with 1113 ACSR or higher rated conductor		ComEd (100%)
b3711	Install 345 kV bus tie 5-20 circuit breaker in the ring at Dresden station in series with existing bus tie 5-6		ComEd (100%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3760	At Powerton substation, replace most limiting facility 800A wave trap with 2000A wave trap on the Powerton – Towerline 138 kV line terminal		AEC (0.93%) / AEP (13.17%) / APS (5.41%) / ATSI (6.91%) / BGE (3.21%) / Dayton (1.80%) / DEOK (2.68%) / DL (1.38%) / Dominion (10.80%) / DPL (1.92%) / ECP (0.14%) / EKPC (1.40%) / HTP (0.12%) / JCPL (2.22%) / ME (1.68%) / Neptune (0.50%) / OVEC (0.02%) / PECO (4.06%) / PENELEC (2.17%) / PEPCO (3.37%) / PPL (3.41%) / PSEG (4.18%) / RE (0.14%) / MISO (28.38%)
b3775.3	Rebuild ComEd's section of 345 kV double circuit in IL from St. John to Crete (5 miles) with twin bundled 1277 ACAR conductor		**Reliability Driver:** ComEd (100.00%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

*Neptune Regional Transmission System, LLC
**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3775.4	Rebuild 12.7 miles of 345 kV double circuit extending from Crete to E. Frankfort with twin bundled 1277 ACAR conductor		**Reliability Driver:** ComEd (100%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)
b3775.5	Replace E. Frankfort 345 kV circuit breaker "9-14" with 3150A SF6 circuit breaker		**Reliability Driver:** ComEd (100%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

*Neptune Regional Transmission System, LLC
**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3810.0	Add three 345 kV circuit breakers to Cherry Valley substation		ComEd (100%)
b3811.1	Expand Haumesser Road 138 kV substation as a 4 circuit breaker ring bus		ComEd (100%)
b3811.2	Add one 138 kV circuit breaker at H-452 to complete a three circuit breaker ring bus		ComEd (100%)
b3811.3	Rebuild 3 miles of 138 kV Line 11323 from Haumesser Road to the H-452 tap with double circuit towers. Cut the H-452 tap over to the 2nd circuit from Haumesser Road. Both circuits to use twisted pair 556 ACSR Parakeet conductor		ComEd (100%)
b3812.1	Reconductor 345 kV Line 11620 and 11622 from Elwood to Goodings Grove		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)

*Neptune Regional Transmission System, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3812.2	Upgrade Goodings Grove 345 kV circuit breakers, disconnects, and associated equipment		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)
b3812.3	Upgrade station conductor at Elwood 345 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)

*Neptune Regional Transmission System, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3812.4	Adjust reclosing cycle on for Goodings Grove 345 kV circuit breaker '116 9806' to eliminate the reclosing de-rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)
b3900.1	Replace 300 copper conductor with 1113 kcmil ACSR conductor on Kewanee 138 kV Bus No. 1		ComEd (100%)
b3901.1	Reconductor 138 kV line from Electric Junction to W541		ComEd (100%)
b3901.2	Replace 2" tubular bus, 2-500 KCMIL Cu and 1113 KCMIL ACSR/AA on bus 2 and line terminal of 138 kV L11106 at TSS 111 Electric Junction with bus that meets or exceeds a minimum thermal capability of 2036/2236/2690A (487/534/643 MVA) SN/SE/SLD		ComEd (100%)
b3902.1	Replace the Wilton Center 345 kV BT 4-5 circuit breaker		ComEd (100%)

*Neptune Regional Transmission System, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3903.1	Replace the Kewannee 138 kV kV L7411 circuit breaker with a SF6 63 kA circuit breaker		ComEd (100%)
b3914.1	Change No-load Tap of 2 Autotransformers at Fisk from 338.25 kV to 346.5 kV		ComEd (100%)
b3914.2	Change No-load Tap of 4 Autotransformers at Crawford from 338.25 kV to 346.5 kV		ComEd (100%)
b3914.3	Change No-load Tap of 3 Autotransformers at Elmhurst from 338.25 kV to 346.5 kV		ComEd (100%)
b3914.4	Change No-load Tap of 2 Autotransformers at West Loop from 338.25 kV to 346.5 kV		ComEd (100%)
b3914.5	Change No-load Tap of 2 Autotransformers at Taylor from 338.25 kV to 346.5 kV		ComEd (100%)
b3914.6	Change No-load Tap of 4 Autotransformers at Skokie from 338.25 kV to 346.5 kV		ComEd (100%)

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3915.1	Reconductor 1.5 miles of 345 kV lines 1202 and 1227 from Dresden to Mulberry with two conductor bundled 1033.5 ACSS conductor. Modify and replace towers as necessary to accommodate the higher mechanical loads of the bundled conductor		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)
b3915.2	Install 345 kV circuit breaker on line 1202 (Dresden-Mulberry 345 kV) and upgrade disconnects and associated equipment at Dresden 345 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)

*Neptune Regional Transmission System, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3915.3	Upgrade disconnects and associated equipment at Mulberry 345 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26 %) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** ComEd (100%)
b3916.1	Install a new 420 MVA 345/138 kV autotransformer and associated 345 kV and 138 kV circuit breakers at Itasca substation		ComEd (100%)
b3943.1	Install a new 345/138 kV transformer TR 84, and associated equipment at State Line substation. Install two 345 kV circuit breakers, one 138 kV circuited breaker and associated equipment, also replace the 138 kV BT 732 circuit breaker at State Line substation.		ComEd (100%)
b3981.1	Install a new 345/138 kV TR83 at Elk Grove and associated equipment. Install three 138 kV and one 345 kV circuit breakers and associated equipment at Elk Grove substation.		ComEd (100%)

*Neptune Regional Transmission System, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3982.1	Disconnect and remove the 34 kV tertiary cap bank on the Cherry Valley 345/138 kV transformer TR 82 and install a 138 kV bus 3 cap bank and associated equipment at Cherry Valley substation.		ComEd (100%)
b4006.1	Install 765/345 kV TR 91 and associated 765 kV and 345 kV circuit breakers at Wilton Center.		AEC (0.91%) / AEP (23.52%) / APS (0.01%) / ATSI (16.14%) / BGE (1.85%) / ComEd (0.11%) / Dayton (6.51%) / DEOK (5.89%) / DL (3.76%) / Dominion (28.49%) / DPL (1.37%) / JCPL (2.21%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.15%) / PENELEC (0.19%) / PEPCO (1.46%) / PSEG (4.03%) / RE (0.15%)
b4025.1	Build new 28-mile transmission line from Mendota to Sandwich.		ComEd (100%)
b4025.2	Convert Mendota straight bus to ring by installing four new 138 kV circuit breakers.		ComEd (100%)
b4025.3	Install 138 kV BT circuit breaker and associated equipment at Sandwich.		ComEd (100%)

*Neptune Regional Transmission System, LLC

Commonwealth Edison Company and Commonwealth Edison Company of Indiana, Inc. (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4073.1	2024W1 P5: Install battery monitoring: Addressing FG No. 2024-P5-COMED01.	ComEd (100%)
b4073.2	2024W1 P5: Install battery monitoring: Addressing FG No. 2024-P5-COMED30.	ComEd (100%)
b4073.3	Install battery monitoring: Addressing FG No. 2024-P5-COMED28.	ComEd (100%)
b4073.4	2024W1 P5: Install battery monitoring: Addressing FG No. 2024-P5-COMED31.	ComEd (100%)
b4073.5	2024W1 P5: Install battery monitoring: Addressing FG No. 2024-P5-COMED29.	ComEd (100%)
b4073.6	Install battery monitoring: Addressing FG No. 2024-P5-COMED14.	ComEd (100%)

SCHEDULE 12 – APPENDIX A

(17) American Electric Power Service Corporation on behalf of its affiliate companies: AEP Appalachian Transmission Company, Inc.; AEP Indiana Michigan Transmission Company, Inc.; AEP Kentucky Transmission Company, Inc.; AEP Ohio Transmission Company, Inc.; AEP West Virginia Transmission Company, Inc.; Appalachian Power Company; Indiana Michigan Power Company; Kentucky Power Company; Kingsport Power Company; Ohio Power Company and Wheeling Power Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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 (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (94.88%) / DEOK (3.79%) / EKPC (1.33%)

*Neptune Regional Transmission System, LLC

American Electric Power Service Corporation on behalf of its affiliate companies: AEP Appalachian Transmission Company, Inc.; AEP Indiana Michigan Transmission Company, Inc.; AEP Kentucky Transmission Company, Inc.; AEP Ohio Transmission Company, Inc.; AEP West Virginia Transmission Company, Inc.; Appalachian Power Company; Indiana Michigan Power Company; Kentucky Power Company; Kingsport Power Company; Ohio Power Company and Wheeling Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1797.1	Reconductor the AEP portion of the Cloverdale - Lexington 500 kV line with 2-1780 ACSS	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
		DFAX Allocation: AEP (6.65%) / Dayton (1.00%) / DEOK (2.17%) / EKPC (0.76%) / OVEC (0.02%) / PEPCO (89.40%)
b2055	Upgrade relay at Brues station	AEP (100%)
b2122.3	Upgrade terminal equipment at Howard on the Howard - Brookside 138 kV line to achieve ratings of 252/291 (SN/SE)	AEP (100%)
b2122.4	Perform a sag study on the Howard - Brookside 138 kV line	AEP (100%)
b2229	Install a 300 MVAR reactor at Dequine 345 kV	AEP (100%)

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American Electric Power Service Corporation on behalf of its affiliate companies: AEP Appalachian Transmission Company, Inc.; AEP Indiana Michigan Transmission Company, Inc.; AEP Kentucky Transmission Company, Inc.; AEP Ohio Transmission Company, Inc.; AEP West Virginia Transmission Company, Inc.; Appalachian Power Company; Indiana Michigan Power Company; Kentucky Power Company; Kingsport Power Company; Ohio Power Company and Wheeling Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2230	Replace existing 150 MVAR reactor at Amos 765 kV substation on Amos - N. Proctorville - Hanging Rock with 300 MVAR reactor		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEP (100%)
b2231	Install 765 kV reactor breaker at Dumont 765 kV substation on the Dumont - Wilton Center line		AEP (100%)
b2232	Install 765 kV reactor breaker at Marysville 765 kV substation on the Marysville - Maliszewski line		AEP (100%)
b2233	Change transformer tap settings for the Baker 765/345 kV transformer		AEP (100%)
b2252	Loop the North Muskingum - Crooksville 138 kV line into AEP's Philo 138 kV station which lies approximately 0.4 miles from the line		AEP (100%)

*Neptune Regional Transmission System, LLC

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2253	Install an 86.4 MVAR capacitor bank at Gorsuch 138 kV station in Ohio		AEP (100%)
b2254	Rebuild approximately 4.9 miles of Corner - Degussa 138 kV line in Ohio		AEP (100%)
b2255	Rebuild approximately 2.8 miles of Maliszewski - Polaris 138 kV line in Ohio		AEP (100%)
b2256	Upgrade approximately 36 miles of 138 kV through path facilities between Harrison 138 kV station and Ross 138 kV station in Ohio		AEP (100%)
b2257	Rebuild the Pokagon - Corey 69 kV line as a double circuit 138 kV line with one side at 69 kV and the other side as an express circuit between Pokagon and Corey stations		AEP (100%)
b2258	Rebuild 1.41 miles of #2 CU 46 kV line between Tams Mountain - Slab Fork to 138 kV standards. The line will be strung with 1033 ACSR		AEP (100%)
b2259	Install a new 138/69 kV transformer at George Washington 138/69 kV substation to provide support to the 69 kV system in the area		AEP (100%)

American Electric Power Service Corporation on behalf of its affiliate companies: AEP Appalachian Transmission Company, Inc.; AEP Indiana Michigan Transmission Company, Inc.; AEP Kentucky Transmission Company, Inc.; AEP Ohio Transmission Company, Inc.; AEP West Virginia Transmission Company, Inc.; Appalachian Power Company; Indiana Michigan Power Company; Kentucky Power Company; Kingsport Power Company; Ohio Power Company and Wheeling Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2286	Rebuild 4.7 miles of Muskingum River - Wolf Creek 138 kV line and remove the 138/138 kV transformer at Wolf Creek Station		AEP (100%)
b2287	Loop in the Meadow Lake - Olive 345 kV circuit into Reynolds 765/345 kV station		AEP (100%)

American Electric Power Service Corporation on behalf of its affiliate companies: AEP Appalachian Transmission Company, Inc.; AEP Indiana Michigan Transmission Company, Inc.; AEP Kentucky Transmission Company, Inc.; AEP Ohio Transmission Company, Inc.; AEP West Virginia Transmission Company, Inc.; Appalachian Power Company; Indiana Michigan Power Company; Kentucky Power Company; Kingsport Power Company; Ohio Power Company and Wheeling Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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%)
b2345.2	Rebuild the 34.5 kV lines between Keeler - Sister Lakes and Glenwood tap switch to 69 kV (~12 miles)		AEP (100%)

American Electric Power Service Corporation on behalf of its affiliate companies: AEP Appalachian Transmission Company, Inc.; AEP Indiana Michigan Transmission Company, Inc.; AEP Kentucky Transmission Company, Inc.; AEP Ohio Transmission Company, Inc.; AEP West Virginia Transmission Company, Inc.; Appalachian Power Company; Indiana Michigan Power Company; Kentucky Power Company; Kingsport Power Company; Ohio Power Company and Wheeling Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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 138 kV circuit		AEP (100%)
b2375	Change the existing CT ratios of the existing equipment along East Danville-Banister 138 kV circuit		AEP (100%)

American Electric Power Service Corporation on behalf of its affiliate companies: AEP Appalachian Transmission Company, Inc.; AEP Indiana Michigan Transmission Company, Inc.; AEP Kentucky Transmission Company, Inc.; AEP Ohio Transmission Company, Inc.; AEP West Virginia Transmission Company, Inc.; Appalachian Power Company; Indiana Michigan Power Company; Kentucky Power Company; Kingsport Power Company; Ohio Power Company and Wheeling Power Company (cont.)

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

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Required Transmission Enhancements		Annual 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 (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEP (100%)

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Required Transmission Enhancements		Annual 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%)

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

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

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2591	Construct a new 69 kV line approximately 2.5 miles from Colfax to Drewry's. Construct a new Drewry's station and install a new circuit breaker at Colfax station.		AEP (100%)
b2592	Rebuild existing East Coshocton – North Coshocton double circuit line which contains Newcomerstown – N. Coshocton 34.5 kV Circuit and Coshocton – North Coshocton 69 kV circuit		AEP (100%)
b2593	Rebuild existing West Bellaire – Glencoe 69 kV line with 138 kV & 69 kV circuits and install 138/69 kV transformer at Glencoe Switch		AEP (100%)
b2594	Rebuild 1.0 mile of Brantley – Bridge Street 69 kV Line with 1033 ACSR overhead conductor		AEP (100%)
b2595.1	Rebuild 7.82 mile Elkhorn City – Haysi S.S 69 kV line utilizing 1033 ACSR built to 138 kV standards		AEP (100%)
b2595.2	Rebuild 5.18 mile Moss – Haysi SS 69 kV line utilizing 1033 ACSR built to 138 kV standards		AEP (100%)
b2596	Move load from the 34.5 kV bus to the 138 kV bus by installing a new 138/12 kV XF at New Carlisle station in Indiana		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2597	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		AEP (100%)
b2598	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		AEP (100%)
b2599	Rebuild approximately 0.1 miles of 69 kV line between Albion and Albion tap		AEP (100%)
b2600	Rebuild Fremont – Pound line as 138 kV		AEP (100%)
b2601	Fremont Station Improvements		AEP (100%)
b2601.1	Replace MOAB towards Beaver Creek with 138 kV breaker		AEP (100%)
b2601.2	Replace MOAB towards Clinch River with 138 kV breaker		AEP (100%)
b2601.3	Replace 138 kV Breaker A with new bus-tie breaker		AEP (100%)
b2601.4	Re-use Breaker A as high side protection on transformer #1		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2601.5	Install two (2) circuit switchers on high side of transformers # 2 and 3 at Fremont Station	AEP (100%)
b2602.1	Install 138 kV breaker E2 at North Proctorville	AEP (100%)
b2602.2	Construct 2.5 Miles of 138 kV 1033 ACSR from East Huntington to Darrah 138 kV substations	AEP (100%)
b2602.3	Install breaker on new line exit at Darrah towards East Huntington	AEP (100%)
b2602.4	Install 138 kV breaker on new line at East Huntington towards Darrah	AEP (100%)
b2602.5	Install 138 kV breaker at East Huntington towards North Proctorville	AEP (100%)
b2603	Boone Area Improvements	AEP (100%)
b2603.1	Purchase approximately a 200X300 station site near Slaughter Creek 46 kV station (Wilbur Station)	AEP (100%)
b2603.2	Install 3 138 kV circuit breakers, Cabin Creek to Hernshaw 138 kV circuit	AEP (100%)
b2603.3	Construct 1 mi. of double circuit 138 kV line on Wilbur – Boone 46 kV line with 1590 ACSS 54/19 conductor @ 482 Degree design temp. and 1-159 12/7 ACSR and one 86 Sq.MM. 0.646" OPGW Static wires	AEP (100%)
b2604	Bellefonte Transformer Addition	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2604.1	Remove approximately 11.32 miles of the 69 kV line between Millbrook Park and Franklin Furnace		AEP (100%)
b2604.2	At Millbrook Park station, add a new 138/69 kV Transformer #2 (90 MVA) with 3000 A 40 kA breakers on the high and low side. Replace the 600 A MOAB switch and add a 3000 A circuit switcher on the high side of Transformer #1		AEP (100%)
b2604.3	Replace Sciotoville 69 kV station with a new 138/12 kV in-out station (Cottrell) with 2000 A line MOABs facing Millbrook Park and East Wheelersburg 138 kV station		AEP (100%)
b2604.4	Tie Cottrell switch into the Millbrook Park – East Wheelersburg 138 kV circuit by constructing 0.50 mile of line using 795 ACSR 26/7 Drake (SE 359 MVA)		AEP (100%)
b2604.5	Install a new 2000 A 3-way PoP switch outside of Texas Eastern 138 kV substation (Sadiq switch)		AEP (100%)
b2604.6	Replace the Wheelersburg 69 kV station with a new 138/12 kV in-out station (Sweetgum) with a 3000 A 40 kA breaker facing Sadiq switch and a 2000 A 138 kV MOAB facing Althea		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2604.7	Build approximately 1.4 miles of new 138 kV line using 795 ACSR 26/7 Drake (SE 359 MVA) between the new Sadiq switch and the new Sweetgum 138 kV station	AEP (100%)
b2604.8	Remove the existing 69 kV Hayport Road switch	AEP (100%)
b2604.9	Rebuild approximately 2.3 miles along existing Right-Of-Way from Sweetgum to the Hayport Road switch 69 kV location as 138 kV single circuit and rebuild approximately 2.0 miles from the Hayport Road switch to Althea 69 kV with double circuit 138 kV construction, one side operated at 69 kV to continue service to K.O. Wheelersburg, using 795 ACSR 26/7 Drake (SE 359 MVA)	AEP (100%)
b2604.10	Build a new station (Althea) with a 138/69 kV, 90 MVA transformer. The 138 kV side will have a single 2000 A 40 kA circuit breaker and the 69 kV side will be a 2000 A 40 kA three breaker ring bus	AEP (100%)
b2604.11	Remote end work at Hanging Rock, East Wheelersburg and North Haverhill 138 kV	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2605	Rebuild and reconductor Kammer – George Washington 69 kV circuit and George Washington – Moundsville ckt #1, designed for 138 kV. Upgrade limiting equipment at remote ends and at tap stations	AEP (100%)
b2606	Convert Bane – Hammondsville from 23 kV to 69 kV operation	AEP (100%)
b2607	Pine Gap Relay Limit Increase	AEP (100%)
b2608	Richlands Relay Upgrade	AEP (100%)
b2609.1	Install two 138 kV MOAB switches at Thorofare Creek substation and one 138 kV breaker at Clendenin substation	AEP (100%)
b2609.3	Terminate the Flatwood, Kanawha River and Capitol Hill lines into the new Coco substation	AEP (100%)
b2610	Rebuild Pax Branch – Scaraboro as 138 kV	AEP (100%)
b2611	Skin Fork Area Improvements	AEP (100%)
b2611.1	New 138/46 kV station near Skin Fork and other components	AEP (100%)
b2611.2	Construct 3.2 miles of 1033 ACSR double circuit from new Station to cut into Sundial-Baileysville 138 kV line	AEP (100%)
b2634.1	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-Tanners Creek 345 kV line)	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2643	Replace the Darrah 138 kV breaker 'L' with 40 kA 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%)
b2668.1	Replace the bus/risers at Dequine 345 kV station		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%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2687.1	Install a +/- 450 MVAR SVC at Jacksons Ferry 765 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2687.2	Install a 300 MVAR shunt line reactor on the Broadford end of the Broadford – Jacksons Ferry 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (100%)
b2697.1	Mitigate violations identified by sag study to operate Fieldale-Thornton-Franklin 138 kV overhead line conductor at its max. operating temperature. 6 potential line crossings to be addressed		AEP (100%)
b2697.2	Replace terminal equipment at AEP's Danville and East Danville substations to improve thermal capacity of Danville – East Danville 138 kV circuit		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)
b2701.3	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 80 kA breakers		AEP (100%)

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

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2753.3	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		AEP (100%)
b2753.6	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		AEP (100%)
b2753.7	Retire line sections (Dilles Bottom – Bellaire and Moundsville – Dilles Bottom 69 kV lines) south of FirstEnergy 138 kV line corridor, near "Point A". Tie George Washington – Moundsville 69 kV circuit to George Washington – West Bellaire 69 kV circuit		AEP (100%)
b2753.8	Rebuild existing 69 kV line as double circuit from George Washington – Dilles Bottom 138 kV. One circuit will cut into Dilles Bottom 138 kV initially and the other will go past with future plans to cut in		AEP (100%)

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Required Transmission Enhancements		Annual 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		AEP (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%)

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Required Transmission 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%)
b2779.6	Construct a 345 kV ring bus at Dunton Lake to serve Steel Dynamics, Inc. (SDI) load at 345 kV via two (2) circuits		AEP (100%)
b2779.7	Retire Collingwood 345 kV station		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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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%)
b2789	Rebuild the Brues - Glendale Heights 69 kV line section (5 miles) with 795 ACSR (128 MVA rating, 43% loading)		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2790	Install a 3 MVAR, 34.5 kV cap bank at Caldwell substation		AEP (100%)
b2791	Rebuild Tiffin – Howard, new transformer at Chatfield		AEP (100%)
b2791.1	Rebuild portions of the East Tiffin - Howard 69 kV line from East Tiffin to West Rockaway Switch (0.8 miles) using 795 ACSR Drake conductor (129 MVA rating, 50% loading)		AEP (100%)
b2791.2	Rebuild Tiffin - Howard 69 kV line from St. Stephen's Switch to Hinesville (14.7 miles) using 795 ACSR Drake conductor (90 MVA rating, non-conductor limited, 38% loading)		AEP (100%)
b2791.3	New 138/69 kV transformer with 138/69 kV protection at Chatfield		AEP (100%)
b2791.4	New 138/69 kV protection at existing Chatfield transformer		AEP (100%)
b2792	Replace the Elliott transformer with a 130 MVA unit, reconductor 0.42 miles of the Elliott – Ohio University 69 kV line with 556 ACSR to match the rest of the line conductor (102 MVA rating, 73% loading) and rebuild 4 miles of the Clark Street – Strouds R		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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Required Transmission Enhancements		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)		**DFAX Allocation:** AEP (35.19%) / Dayton (33.38%) / DEOK (31.43%)
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		**DFAX Allocation:** AEP (43.18%) / ATSI (38.14%) / Dayton (18.68%)
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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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

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Required Transmission Enhancements		Annual Revenue Requirement	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%)

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

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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 80 kA breaker		AEP (100%)
b3001	Replace South Canton 138 kV breaker 'N1' with an 80 kA breaker		AEP (100%)
b3002	Replace South Canton 138 kV breaker 'N2' with an 80 kA 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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3086.3	Rebuild West Melrose – Whirlpool 34 kV line Str's 55–80 (1 mile), utilizing 795 26/7 ACSR conductor		AEP (100%)
b3086.4	North Findlay station: Install a 138 kV 3000A 63 kA line breaker and low side 34.5 kV 2000A 40 kA breaker, high side 138 kV circuit switcher on T1		AEP (100%)
b3086.5	Ebersole station: Install second 90 MVA 138/69/34 kV transformer. Install two low side (69 kV) 2000A 40 kA breakers for T1 and T2		AEP (100%)
b3087.1	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 40 kA 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		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 – Cedar Creek 138 kV circuit		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3087.3	Remote end work will be required at Cedar Creek Station		AEP (100%)
b3087.4	Install 28.8 MVAR switching shunt at the new Fords Branch substation		AEP (100%)
b3095	Rebuild Lakin – Racine Tap 69 kV line section (9.2 miles) to 69 kV standards, utilizing 795 26/7 ACSR conductor		AEP (100%)
b3099	Install a 138 kV 3000A 40 kA circuit switcher on the high side of the existing 138/34.5 kV transformer No.5 at Holston station		AEP (100%)
b3100	Replace the 138 kV MOAB switcher "YY" with a new 138 kV circuit switcher on the high side of Chemical transformer No.6		AEP (100%)
b3101	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 556 ACSR conductor and upgrade existing relay trip limit (WN/WE: 63 MVA, line limited by remaining conductor sections)		AEP (100%)
b3102	Replace existing 50 MVA 138/69 kV transformers #1 and #2 (both 1957 vintage) at Fremont station with new 130 MVA 138/69 kV transformers		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3103.1	Install a 138/69 kV transformer at Royerton station. Install a 69 kV bus with one 69 kV breaker toward Bosman station. Rebuild the 138 kV portion into a ring bus configuration built for future breaker and a half with four 138 kV breakers		AEP (100%)
b3103.2	Rebuild the Bosman/Strawboard station in the clear across the road to move it out of the flood plain and bring it up to 69 kV standards		AEP (100%)
b3103.3	Retire 138 kV breaker L at Delaware station and re-purpose 138 kV breaker M for the Jay line		AEP (100%)
b3103.4	Retire all 34.5 kV equipment at Hartford City station. Re-purpose breaker M for the Bosman line 69 kV exit		AEP (100%)
b3103.5	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 the 69 kV portion of this station as a 6 breaker ring bus re-using the 2 existing 69 kV breakers. Install a new 138/69 kV transformer		AEP (100%)

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

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Required Transmission Enhancements		Annual Revenue Requirement	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 re-terminating 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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3118.5	Terminate the Bellefonte – Grangston 138 kV circuit to the Chadwick 138 kV bus		AEP (100%)
b3118.6	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		AEP (100%)
b3118.7	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		AEP (100%)
b3118.8	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		AEP (100%)
b3118.9	Rebuild 336 ACSR portion of Leach – Miller S.S 69 kV line section (approx. 0.3 mile) with 795 ACSS conductor		AEP (100%)
b3118.10	Replace 69 kV line risers (towards Chadwick) at Leach station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3119.1	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 North Portland station		AEP (100%)
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%)
b3131.1	Rebuild approximately 12.3 miles of remaining Lark conductor on the double circuit line between Haviland and East Lima with 1033 54/7 ACSR conductor		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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3141	Rebuild the Knox Creek – Coal Creek 69 kV line (approx. 2.9 miles)		AEP (100%)
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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3151.11	Rebuild Columbia station in the clear as a 138/69 kV station with two (2) 138/69 kV transformers and 4-breaker ring buses on the high and low side. Station will reuse 69 kV breakers "J" & "K" and 138 kV breaker "D"		AEP (100%)
b3151.12	Rebuild the 13 miles of the Columbia – Richland 69 kV line		AEP (100%)
b3151.13	Rebuild the 0.5 mile Whitley – Columbia City No.1 line as 69 kV		AEP (100%)
b3151.14	Rebuild the 0.5 mile Whitley – Columbia City No.2 line as 69 kV		AEP (100%)
b3151.15	Rebuild the 0.6 mile double circuit section of the Rob Park – South Hicksville / Rob Park – Diebold Road as 69 kV		AEP (100%)
b3160.1	Construct an approx. 2.4 miles double circuit 138 kV extension using 1033 ACSR (Aluminum Conductor Steel Reinforced) to connect Lake Head to the 138 kV network		AEP (100%)
b3160.2	Retire the approx.2.5 miles 34.5 kV Niles – Simplicity Tap line		AEP (100%)
b3160.3	Retire the approx.4.6 miles Lakehead 69 kV Tap		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3208	Retire approximately 38 miles of the 44 mile Clifford – Scottsville 46 kV circuit. 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 from Joshua Falls – Riverville (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)		AEP (100%)
b3209	Rebuild the 10.5 mile Berne – South Decatur 69 kV line using 556 ACSR		AEP (100%)
b3210	Replace approx. 0.7 mile Beatty – Galloway 69 kV line with 4000 kcmil XLPE cable		AEP (100%)
b3220	Install 14.4 MVAR capacitor bank at Whitewood 138 kV		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3243	Replace risers at the Bass 34.5 kV station		AEP (100%)
b3244	Rebuild approximately 9 miles of the Robinson Park – Harlan 69 kV line		AEP (100%)
b3248	Install a low side 69 kV circuit breaker at the Albion 138/69 kV transformer #1		AEP (100%)
b3249	Rebuild the Chatfield – Melmore 138 kV line (approximately 10 miles) to 1033 ACSR conductor		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3253	Install a 3000A 40 kA 138 kV breaker on the high side of 138/69 kV transformer #5 at the Millbrook Park station. The transformer and associated bus protection will be upgraded accordingly		AEP (100%)
b3255	Upgrade 795 AAC risers at the Sand Hill 138 kV station towards Cricket Switch with 1272 AAC		AEP (100%)
b3256	Upgrade 500 MCM Cu risers at Tidd 138 kV station towards Wheeling Steel; replace with 1272 AAC conductor		AEP (100%)
b3257	Replace two spans of 336.4 26/7 ACSR on the Twin Branch – AM General #2 34.5 kV circuit		AEP (100%)
b3258	Install a 3000A 63 kA 138 kV breaker on the high side of 138/69 kV transformer #2 at Wagenhals station. The transformer and associated bus protection will be upgraded accordingly		AEP (100%)
b3259	At West Millersburg station, replace the 138 kV MOAB on the West Millersburg – Wooster 138 kV line with a 3000A 40 kA breaker		AEP (100%)
b3261	Upgrade circuit breaker “R1” at Tanners Creek 345 kV. Install Transient Recovery Voltage capacitor to increase the rating from 50 kA to 63 kA		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3269	At West New Philadelphia station, add a high side 138 kV breaker on the 138/69 kV Transformer #2 along with a 138 kV breaker on the line towards Newcomerstown		AEP (100%)
b3270	Install 1.7 miles of 795 ACSR 138 kV conductor along the other side of Dragoon Tap 138 kV line, which is currently double circuit tower with one position open. Additionally, install a second 138/34.5 kV transformer at Dragoon, install a high side circuit switcher on the current transformer at the Dragoon Station, and install two (2) 138 kV line breakers on the Dragoon – Jackson 138 kV and Dragoon – Twin Branch 138 kV lines		AEP (100%)
b3270.1	Replace Dragoon 34.5 kV breakers “B”, “C”, and “D” with 40 kA breakers		AEP (100%)
b3271	Install a 138 kV circuit breaker at Fremont station on the line towards Fremont Center and install a 9.6 MVAR 69 kV capacitor bank at Bloom Road station		AEP (100%)
b3272	Install two 138 kV circuit switchers on the high side of 138/34.5 kV Transformers #1 and #2 at Rockhill station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3273.1	Rebuild and convert the existing 17.6 miles East Leipsic – New Liberty 34.5 kV circuit to 138 kV using 795 ACSR		AEP (100%)
b3273.2	Convert the existing 34.5 kV equipment to 138 kV and expand the existing McComb station to the north and east to allow for new equipment to be installed. Install two (2) new 138 kV box bays to allow for line positions and two (2) new 138/12 kV transformers		AEP (100%)
b3273.3	Expand the existing East Leipsic 138 kV station to the north to allow for another 138 kV line exit to be installed. The new line exit will involve installing a new 138 kV circuit breaker, disconnect switches and the addition of a new dead end structure along with the extension of the existing 138 kV bus work		AEP (100%)
b3273.4	Add one (1) 138 kV circuit breaker and disconnect switches in order to add an additional line position at New Liberty 138 kV station. Install line relaying potential devices and retire the 34.5 kV breaker 'F'		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3274	Rebuild approximately 8.9 miles of 69 kV line between Newcomerstown and Salt Fork Switch with 556 ACSR conductor		AEP (100%)
b3275.1	Rebuild the Kammer Station – Cresaps Switch 69 kV line, approximately 0.5 mile		AEP (100%)
b3275.2	Rebuild the Cresaps Switch – McElroy Station 69 kV, approximately 0.67 mile		AEP (100%)
b3275.3	Replace a single span of 4/0 ACSR from Moundsville - Natrium structure 93L to Carbon Tap switch 69 kV located between the Colombia Carbon and Conner Run stations. Remainder of the line is 336 ACSR		AEP (100%)
b3275.4	Rebuild from Colombia Carbon to Columbia Carbon Tap structure 93N 69 kV, approximately 0.72 mile. The remainder of the line between Colombia Carbon Tap structure 93N and Natrium station is 336 ACSR and will remain		AEP (100%)
b3275.5	Replace the Cresaps 69 kV 3-Way Phase-Over-Phase switch and structure with a new 1200A 3-Way switch and steel pole		AEP (100%)
b3275.6	Replace 477 MCM Alum bus and risers at McElroy 69 kV station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3275.7	Replace Natrium 138 kV bus existing between CB-BT1 and along the 138 kV Main Bus #1 dropping to CBH1 from the 500 MCM conductors to a 1272 KCM AAC conductor. Replace the dead end clamp and strain insulators		AEP (100%)
b3276.1	Rebuild the 2/0 Copper section of the Lancaster – South Lancaster 69 kV line, approximately 2.9 miles of the 3.2 miles total length with 556 ACSR conductor. The remaining section has a 336 ACSR conductor		AEP (100%)
b3276.2	Rebuild the 1/0 Copper section of the line between Lancaster Junction and Ralston station 69 kV, approximately 2.3 miles of the 3.1 miles total length		AEP (100%)
b3276.3	Rebuild the 2/0 Copper portion of the line between East Lancaster Tap and Lancaster 69 kV, approximately 0.81 mile		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3278.1	Replace H.S. MOAB switches on the high side of the 138/69/34.5 kV transformer T1 with a H.S. circuit switcher at Saltville station		AEP (100%)
b3278.2	Replace existing 138/69/34.5 kV transformer T2 with a new 130 MVA 138/69/13 kV transformer at Meadowview station		AEP (100%)
b3279	Install a new 138 kV, 21.6 MVAR cap bank and circuit switcher at Apple Grove station		AEP (100%)
b3280	Rebuild the existing Cabin Creek – Kelly Creek 46 kV line (to Structure 366-44), approximately 4.4 miles. This section is double circuit with the existing Cabin Creek – London 46 kV line so a double circuit rebuild would be required		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3281	Install 138 kV circuit switcher on the 138/69 kV Transformer #1 and 138/34.5 kV Transformer #2 at Dewey 138 kV substation. Install 138 kV 2000 A 40 kA breaker on Stanville line at Dewey 138 kV substation		AEP (100%)
b3282.1	Install a second 138 kV circuit utilizing 795 ACSR conductor on the open position of the existing double circuit towers from East Huntington – North Proctorville. Remove the existing 34.5 kV line from East Huntington – North Chesapeake and rebuild this section to 138 kV served from a new PoP switch off the new East Huntington – North Proctorville 138 kV #2 line		AEP (100%)
b3282.2	Install a 138 kV 40 kA circuit breaker at North Proctorville station		AEP (100%)
b3282.3	Install a 138 kV 40 kA circuit breaker at East Huntington station		AEP (100%)
b3282.4	Convert the existing 34/12 kV North Chesapeake to a 138/12 kV station		AEP (100%)
b3283	Replace the existing Inez 138/69 kV 50 MVA autotransformer with a 138/69 kV 90 MVA autotransformer		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3284	Rebuild approximately 5.44 miles of 69 kV line from Lock Lane to Point Pleasant		AEP (100%)
b3285	Replace the Meigs 69 kV 4/0 Cu station riser towards Gavin and rebuild the section of the Meigs – Hemlock 69 kV circuit from Meigs to approximately Structure #40 (about 4 miles) replacing the line conductor 4/0 ACSR with the line conductor size 556.5 ACSR		AEP (100%)
b3286	Reconductor the first 3 spans from Merrimac station to Structure 464-3 of 3/0 ACSR conductor utilizing 336 ACSR on the existing Merrimac – Midway 69 kV circuit		AEP (100%)
b3287	Upgrade 69 kV risers at Moundsville station towards George Washington		AEP (100%)
b3288.1	Construct approximately 2.75 miles Orinoco – Stone 69 kV transmission line in the clear between Orinoco station and Stone station		AEP (100%)
b3288.2	Construct approximately 3.25 miles Orinoco – New Camp 69 kV transmission line in the clear between Orinoco station and New Camp station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3288.3	At Stone substation, circuit breaker A to remain in place and be utilized as T1 low side breaker, circuit breaker B to remain in place and be utilized as new Hatfield (via Orinoco and New Camp) 69 kV line breaker. Add new 69 kV circuit breaker E for Coleman line exit		AEP (100%)
b3288.4	Reconfigure the New Camp 69 kV tap which includes access road improvements/installation, temporary wire and permanent wire work along with dead end structures installation		AEP (100%)
b3288.5	At New Camp substation, rebuild the 69 kV bus, add 69 kV MOAB W and replace the 69 kV ground switch Z1 with a 69 kV circuit switcher on the New Camp transformer		AEP (100%)
b3289.1	Install high-side circuit switcher on 138/69/12 kV T5 at Roanoke station		AEP (100%)
b3289.2	Install high-side circuit switcher on 138/69/34.5 kV T1 at Huntington Court station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3290.1	Build 9.4 miles of single circuit 69 kV line from Roselms to near East Ottoville 69 kV switch		AEP (100%)
b3290.2	Rebuild 7.5 miles of double circuit 69 kV line between East Ottoville switch and Kalida station (combining with the new Roselms to Kalida 69 kV circuit)		AEP (100%)
b3290.3	At Roselms switch, install a new three way 69 kV, 1200 A phase-over-phase switch, with sectionalizing capability		AEP (100%)
b3290.4	At Kalida 69 kV station, terminate the new line from Roselms switch. Move the CS XT2 from high side of T2 to the high side of T1. Remove existing T2 transformer		AEP (100%)
b3291	Replace the Russ St. 34.5 kV switch		AEP (100%)
b3292	Replace existing 69 kV capacitor bank at Stuart station with a 17.2 MVAR capacitor bank		AEP (100%)
b3293	Replace 2/0 Cu entrance span conductor on the South Upper Sandusky 69 kV line and 4/0 Cu Risers/Bus conductors on the Forest line at Upper Sandusky 69 kV station		AEP (100%)
b3294	Replace existing 69 kV disconnect switches for circuit breaker "C" at Walnut Avenue station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3295	Grundy 34.5 kV: Install a 34.5 kV 9.6 MVAR cap bank		AEP (100%)
b3296	Rebuild the overloaded portion of the Concord – Whitaker 34.5 kV line (1.13 miles). Rebuild is double circuit and will utilize 795 ACSR conductor		AEP (100%)
b3297.1	Rebuild 4.23 miles of 69 kV line between Sawmill and Lazelle station, using 795 ACSR 26/7 conductor		AEP (100%)
b3297.2	Rebuild 1.94 miles of 69 kV line between Westerville and Genoa stations, using 795 ACSR 26/7 conductor		AEP (100%)
b3297.3	Replace risers and switchers at Lazelle, Westerville, and Genoa 69 kV stations. Upgrade associated relaying accordingly		AEP (100%)
b3298	Rebuild 0.8 mile of double circuit 69 kV line between South Toronto and West Toronto. Replace 219 ACSR with 556 ACSR		AEP (100%)
b3298.1	Replace the 69 kV breaker D at South Toronto station with 40 kA breaker		AEP (100%)
b3299	Rebuild 0.2 mile of the West End Fostoria - Lumberjack Switch 69 kV line with 556 ACSR (Dove) conductors. Replace jumpers on West End Fostoria line at Lumberjack Switch		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3307	Rebuild Fleming station in the clear; Replace 138/69 kV Fleming Transformer #1 with 138/69 kV 130 MVA transformer with high side 138 kV CB; Install a 5 breaker 69 kV ring bus on the low side of the transformer, replace 69 kV circuit switcher AA, replace 69/12 kV Transformer #3 with 69/12 kV 30 MVA transformer, replace 12 kV CB A and D; Retire existing Fleming substation		AEP (100%)
b3308	Reconductor and rebuild 1 span of T-line on the Fort Steuben – Sunset Blvd 69 kV branch with 556 ACSR		AEP (100%)
b3309	Rebuild 1.75 miles of the Greenlawn – East Tiffin line section of the Carothers – Greenlawn 69 kV circuit containing 133 ACSR conductor with 556 ACSR conductor. Upgrade relaying as required		AEP (100%)
b3310.1	Rebuild 10.5 miles of the Howard – Willard 69 kV line utilizing 556 ACSR conductor		AEP (100%)
b3310.2	Upgrade relaying at Howard 69 kV station		AEP (100%)
b3310.3	Upgrade relaying at Willard 69 kV station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3312	Rebuild approximately 4 miles of existing 69 kV line between West Mount Vernon and Mount Vernon stations. Replace the existing 138/69 kV transformer at West Mount Vernon with a larger 90 MVA unit along with existing 69 kV breaker 'C'		AEP (100%)
b3313	Add 40 kA circuit breakers on the low and high side of the East Lima 138/69 kV transformer		AEP (100%)
b3314.1	Install a new 138/69 kV 130 MVA transformer and associated protection at Elliot station		AEP (100%)
b3314.2	Perform work at Strouds Run station to retire 138/69/13 kV 33.6 MVA Transformer #1 and install a dedicated 138/13 KV distribution transformer		AEP (100%)
b3315	Upgrade relaying on Mark Center – South Hicksville 69 kV line and replace Mark Center cap bank with a 7.7 MVAR unit		AEP (100%)
b3320	Replace the CT at Don Marquis 345 kV station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3333.14	Install approximately 2.6 miles greenfield 69 kV line from greenfield Mount Heron station to the existing Horn Mountain Substation		AEP (100%)
b3336	Rebuild 6 miles Benton Harbor - Riverside 138 kV double circuit extension		AEP (100%)
b3337	Replace the one (1) Hyatt 138 kV breaker "AB1" (101N) with 3000 A, 63 kA interrupting breaker		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3338	Replace the two (2) Kenny 138 kV breakers, "102" (SC-3) and "106" (SC-4), each with a 3000 A, 63 kA interrupting breaker		AEP (100%)
b3339	Replace the one (1) Canal 138 kV breaker "3" with 3000 A, 63 kA breaker		AEP (100%)
b3342	Replace the 2156 ACSR and 2874 ACSR bus and risers with 2-bundled 2156 ACSR at Muskingum River 345 kV station to address loading issues on Muskingum - Waterford 345 kV line		AEP (100%)
b3343	Rebuild approximately 0.3 miles of the overloaded 69 kV line between Albion - Philips Switch and Philips Switch - Brimfield Switch with 556 ACSR conductor		AEP (100%)
b3344.1	Install two (2) 138 kV circuit breakers in the M and N strings in the breaker-and-a half configuration in West Kingsport station 138 kV yard to allow the Clinch River - Moreland Dr. 138 kV to cut in the West Kingsport station		AEP (100%)
b3344.2	Upgrade remote end relaying at Riverport 138 kV station due to the line cut in at West Kingsport station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3345.1	Rebuild approximately 4.2 miles of overloaded sections of the 69 kV line between Salt Fork switch and Leatherwood switch with 556 ACSR		AEP (100%)
b3345.2	Update relay settings at Broom Road station		AEP (100%)
b3346.1	Rebuild approximately 3.5 miles of overloaded 69 kV line between North Delphos – East Delphos – Elida Road switch station. This includes approximately 1.1 miles of double circuit line that makes up a portion of the North Delphos – South Delphos 69 kV line and the North Delphos – East Delphos 69 kV line. Approximately 2.4 miles of single circuit line will also be rebuilt between the double circuit portion to East Delphos station and from East Delphos to Elida Road switch station		AEP (100%)
b3346.2	Replace the line entrance spans at South Delphos station to eliminate the overloaded 4/0 Copper and 4/0 ACSR conductor		AEP (100%)
b3347.1	Rebuild approximately 20 miles of 69 kV line between Bancroft and Milton stations with 556 ACSR conductor		AEP (100%)
b3347.2	Replace the jumpers around Hurrican switch with 556 ACSR		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3347.3	Replace the jumpers around Teays switch with 556 ACSR		AEP (100%)
b3347.4	Update relay settings at Winfield station to coordinate with remote ends on line rebuild		AEP (100%)
b3347.5	Update relay settings at Bancroft station to coordinate with remote ends on line rebuild		AEP (100%)
b3347.6	Update relay settings at Milton station to coordinate with remote ends on line rebuild		AEP (100%)
b3347.7	Update relay settings at Putnam Village station to coordinate with remote ends on line rebuild		AEP (100%)
b3348.1	Construct a 138 kV single bus station (Tin Branch) consisting of a 138 kV box bay with a distribution transformer and 12 kV distribution bay. Two 138 kV lines will feed this station (from Logan and Sprigg stations), and distribution will have one 12 kV feed. Install two 138 kV circuit breakers on the line exits. Install 138 kV circuit switcher for the new transformer		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3348.2	Construct a new 138/46/12 kV Argyle station to replace Dehue 46 kV station. Install a 138 kV ring bus using a breaker-and-a-half configuration, with an autotransformer with a 46 kV feed and a distribution transformer with a 12 kV distribution bay. Two 138 kV lines will feed this station (from Logan and Wyoming stations). There will also be a 46 kV feed from this station to Becco station. Distribution will have two 12 kV feeds. Retire Dehue 46 kV station in its entirety		AEP (100%)
b3348.3	Bring the Logan – Sprigg #2 138 kV circuit in and out of Tin Branch station by constructing approximately 1.75 miles of new overhead double circuit 138 kV line. Double circuit T3 series lattice towers will be used along with 795,000 cm ACSR 26/7 conductor. One shield wire will be conventional 7 #8 ALUMOWELD, and one shield wire will be optical ground wire (OPGW)		AEP (100%)
b3348.4	Logan-Wyoming No. 1 circuit in and out of the proposed Argyle 46 kV station. Double circuit T3 series lattice towers will be used along with 795,000 cm ACSR 26/7 conductor. One shield wire will be conventional 7 #8 ALUMOWELD, and one shield wire will be OPGW		AEP (100%)
b3348.5	Rebuild approximately 10 miles of 46 kV line between Becco and the new Argyle 46 kV substation. Retire approximately 16 miles of 46 kV line between the new Argyle substation and Chauncey station		AEP (100%)
b3348.6	Adjust relay settings due to new line terminations and retirements at Logan, Wyoming, Sprigg, Becco and Chauncey stations		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3349	Replace Bellefonte 69 kV risers on the section between Bellefonte Transformer #3 and 69 kV Bus #2		AEP (100%)
b3350.1	Replace Bellefonte 69 kV breakers C, G, I, Z, AB and JJ in place. The new 69 kV breakers to be rated at 3000 A 40 kA		AEP (100%)
b3350.2	Upgrade remote end relaying at Point Pleasant, Coalton and South Point 69 kV substations		AEP (100%)
b3351	Replace the 69 kV in-line switches at Monterey 69 kV substation		AEP (100%)
b3352	Replace MOAB W, MOAB Y, and line and bus side jumpers of both W and Y MOABs at 47th Street 69 kV station. Upgrade the 69 kV strain bus between MOABs W and Y to 795 KCM AAC. Change the connectors on the tap to MOAB X1 to accommodate the larger 795 KCM AAC		AEP (100%)
b3353.1	Rebuild Allen station to the northwest of its current footprint utilizing a standard air-insulated substation with equipment raised by 7’ concrete platforms and control house raised by a 10’ platform to mitigate flooding concerns. Install five 69 kV 3000A 40 kA circuit breakers in a ring bus (operated at 46 kV) configuration with a 13.2 MVAR capacitor bank. Existing Allen station will be retired (does not include the distribution cost). Distribution scope of work: Install 69/46 kV-12 kV 20 MVA transformer along with 2-12 kV breakers on 7’ concrete platforms (conversion of S2405.1)		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3353.2	A 0.20 mile segment of Allen – East Prestonsburg 46 kV line will be relocated to the new Allen 46 kV station (SN/SE/WN/WE: 53/61/67/73 MVA) (Conversion of S2405.2)		AEP (100%)
b3353.3	The McKinney – Allen new line extension will walk around the south and east sides of the existing Allen station to the new Allen station being built in the clear. A short segment of new single circuit 69 kV line and a short segment of new double circuit 69 kV line (both operated at 46 kV) will be added to the line to tie into the new Allen station bays (Conversion of S2405.3)		AEP (100%)
b3353.4	A segment of Stanville – Allen 46 kV line will be relocated to the new Allen station (SN/SE/WN/WE: 50/50/63/63 MVA) (Conversion of S2405.4)		AEP (100%)
b3353.5	0.25 mile segment of the existing Allen – Prestonsburg 46 kV single circuit will be relocated. The relocated line segment will require construction of one custom self-supporting double circuit dead-end structure and single circuit suspension structure. A short segment of new double circuit 69 kV line (energized at 46 kV) will be added to tie into the new Allen station bays, which will carry Allen – Prestonsburg 46 kV and Allen-East Prestonsburg 46 kV lines. A temporary 0.15 mile section double circuit line will be constructed to keep Allen – Prestonsburg and Allen – East Prestonsburg 46 kV lines energized during construction (Conversion of S2405.5)		AEP (100%)
b3353.6	Remote end work will be required at Prestonsburg, Stanville and McKinney 46 kV stations (Conversion of S2405.6)		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3354	Replace circuit breakers '42' and '43' at Bexley station with 3000 A, 40 kA 69 kV breakers (operated at 40 kV), slab, control cables and jumpers		AEP (100%)
b3355	Replace circuit breakers 'A' and 'B' at South Side Lima station with 1200 A, 25 kA 34.5 kV breakers, slab, control cables and jumpers		AEP (100%)
b3356	Replace circuit breaker 'H' at West End Fostoria station with 3000 A, 40 kA 69 kV breaker, slab, control cables and jumpers		AEP (100%)
b3357	Replace circuit breakers 'C', 'E,' and 'L' at Natrium station with 3000 A, 40 kA 69 kV breakers, slab, control cables and jumpers		AEP (100%)
b3358	Install a 69 kV 11.5 MVAR capacitor at Biers Run 69 kV station		AEP (100%)
b3359	Rebuild approximately 2.3 miles of the existing North Van Wert Sw. – Van Wert 69 kV line utilizing 556 ACSR conductor		AEP (100%)
b3360	Replace Thelma Transformer #1 with a 138/69/46 kV 130/130/90 MVA transformer and replace 46 kV risers and relaying toward Kenwood substation. Existing Transformer #1 to be used as spare		AEP (100%)
b3361	Rebuild Prestonsburg - Thelma 46kV circuit connecting though Kenwood station, approximately 12.7 miles. Retire Jenny Wiley SS and Van Lear SS		AEP (100%)
b3362	Rebuild approximately 3.1 miles of the overloaded conductor on the existing Oertels Corner – North Portsmouth 69 kV line utilizing 556 ACSR		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3722	Rebuild the existing Darrah – Barnett 69 kV line, approximately 2.8 miles and replace a riser at Darrah station		AEP (100%)
b3723	Rebuild the George Washington – Kammer 138 kV circuit, except for 0.1 mile of previously-upgraded T-line outside each terminal station (6.7 miles of total upgrade scope). Remove the existing 6-wired steel lattice towers and supplement the right-of-way as needed		AEP (100%)
b3724	Install 138 kV circuit switcher on the high-side of Transformer #2 at Roanoke station (previously proposed as a portion of s2469.7, posted in 2021 AEP local plan)		AEP (100%)
b3731	Replace 40 kV breaker J at McComb 138 kV station with a new 3000A 40 kA breaker		AEP (100%)
b3732	Install a 6 MVAR, 34.5 kV cap bank at Morgan Run station		AEP (100%)
b3733	Rebuild the 1.8 mile 69 kV line between Summerhill and Willow Grove Switch. Replace 4/0 ACSR conductor with 556 ACSR		AEP (100%)
b3734	Install a 7.7 MVAR, 69 kV cap bank at both Otway station and Rosemount station		AEP (100%)
b3735	Terminate the existing Broadford – Wolf Hills #1 138 kV line into Abingdon 138 kV Station. This line currently bypasses the existing Abingdon 138 kV station; Install two new 138 kV circuit breakers on each new line exit towards Broadford and towards Wolf Hills #1 station; Install one new 138 kV circuit breaker on line exit towards South Abingdon station for standard bus sectionalizing		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3736.1	Establish 69 kV bus and new 69 kV line Circuit Breaker at Dorton substation		AEP (100%)
b3736.2	At Breaks substation, reuse 72 kV breaker A as the new 69 kV line breaker		AEP (100%)
b3736.3	Rebuild approximately 16.7 miles Dorton – Breaks 46 kV line to 69 kV line		AEP (100%)
b3736.4	Retire approximately 17.2 miles Cedar Creek – Elwood 46 kV line		AEP (100%)
b3736.5	Retire approximately 6.2 miles Henry Clay – Elwood 46 kV line section		AEP (100%)
b3736.6	Retire Henry Clay 46 kV substation and replace with Poor Bottom 69 kV station. Install a new 0.7 mile double circuit extension to Poor Bottom 69 kV station		AEP (100%)
b3736.7	Retire Draffin substation and replace with a new substation. Install a new 0.25 mile double circuit extension to New Draffin substation		AEP (100%)
b3736.8	Remote end work at Jenkins substation		AEP (100%)
b3736.9	Provide transition fiber to Dorton, Breaks, Poor Bottom, Jenkins and New Draffin 69 kV substations		AEP (100%)
b3736.10	Henry Clay switch station retirement		AEP (100%)
b3736.11	Cedar Creek substation work		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3736.12	Breaks substation 46 kV equipment retirement		AEP (100%)
b3736.13	Retire Pike 29 switch station and Rob Fork switch station		AEP (100%)
b3736.14	Serve Pike 29 and Rob Fork substation customers from nearby 34 kV distribution sources		AEP (100%)
b3736.15	Poor Bottom 69 kV substation install		AEP (100%)
b3736.16	Henry Clay 46 kV substation retirement		AEP (100%)
b3736.17	New Draffin 69 kV substation install		AEP (100%)
b3736.18	Draffin 46 kV substation retirement		AEP (100%)
b3748	Replace four Clifty Creek 345 kV 3000A switches with 5000 A 345 kV switches		AEP (100%)
b3763	Replace the Jug Street 138 kV breakers M, N, BC, BD, BE, BF, D, H, J, L, BG, BH, BJ, BK with 80 KA breakers		AEP (100%)
b3764	Replace the Hyatt 138 kV breakers AB1 and AD1 with 63 kA breakers		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3766.1	Hayes – New Westville 138 kV line: Build approximately 0.19 miles of 138 kV line to the Indiana/ Ohio State line to connect to AES's line portion of the Hayes – New Westville 138 kV line with the conductor size 795 ACSR26/7 Drake. This sub-ID includes the cost of line construction and Right of Way (ROW)		AEP (100%)
b3766.2	Hayes – Hodgin 138 kV line: Build approximately 0.05 mile of 138 kV line with the conductor size 795 ACSR26/7 Drake. This sub-ID includes the line construction, ROW, and fiber		AEP (100%)
b3766.3	Hayes 138 kV: Build a new 4-138 kV circuit breaker ring bus. This sub-ID includes the cost of new station construction, property purchase, metering, station fiber and the College Corner – Randolph 138 kV line connection		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3775.6	Perform sag study mitigation work on the Dumont – Stillwell 345 kV line (remove a center-pivot irrigation system from under the line, allowing for the normal and emergency ratings of the line to increase)	**Reliability Driver:** AEP (90.58%) / ComEd (9.42%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3775.7	Upgrade the limiting element at Stillwell or Dumont substation to increase the rating of the Stillwell – Dumont 345 kV line to match conductor rating	**Reliability Driver:** AEP (90.58%) / Dayton (9.42%)
		Market Efficiency Driver: AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3775.10	Perform a sag study on the Olive – University Park 345 kV line to increase the operating temperature to 225 F. Remediation work includes two tower replacements on the line.		**Reliability Driver:** AEP (100%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)
b3775.11	Upgrade the limiting element at Stillwell substation to increase the rating of the Stillwell – Dumont 345 kV line to match conductor rating		**Reliability Driver:** AEP (90.58%) / ComEd (9.42%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3784.1	Replace 138 kV breaker 5 at Canal Street station with a new 3000A 63 kA breaker		AEP (100%)
b3785.1	Replace existing 3000 A wave trap at Mountaineer 765 kV, on the Belmont - Mountaineer 765 kV line, with a new 5000 A wave trap		AEP (100%)
b3786.1	Rebuild approximately 4.5 miles of 69 kV line between Abert and Reusens 69 kV substations. Update line settings at Reusens and Skimmer 69 kV substations		AEP (100%)
b3787.1	Install a Capacitor Voltage Transformer (CCVT) on 3 phase stand and remove the single phase existing CCVT on the 69 kV Coalton to Bellefonte line exit. The existing CCVT is mounted to lattice on a single phase CCVT stand, which will be replaced with the 3 phase CCVT stand. The line riser between line disconnect and line take off is being replaced. This remote end work changes the most limiting series element (MLSE) of the line section between Coalton - Princess 69 kV line section		AEP (100%)
b3788.1	Replace AEP owned station takeoff riser and breaker BB risers at OVEC owned Kyger Creek station		AEP (100%)
b3790.0	Replace the overdutied Olive 345 kV circuit breaker "D" with a 5000A 63 kA circuit breaker. Reuse existing cables and a splice box to support the circuit breaker install		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.100	Establish a new 500 kV breaker position for the low-side of the existing 765/500 kV transformer at Cloverdale Station. The new position will be between two new 500 kV circuit breakers located in a new breaker string, electrically converting the 500 kV yard to "double-bus double-breaker" configuration.	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3800.121	Kammer to 502 Junction 500 kV line: Conduct LIDAR Sag Study to assess SE rating and needed upgrades	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (21.66%) / APS (0.01%) / BGE (7.14%) / DEOK (0.01%) / Dominion (62.25%) / PEPCO (8.93%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3836.1	Rebuild approximately 1.7 miles of line on the Chemical - Washington Street 46 kV circuit		AEP (100%)
b3837.1	Replace existing 34.5 kV, 25 kA circuit breaker B at West Huntington station with new 69 kV, 40 kA circuit breaker		AEP (100%)
b3838.1	Replace breaker A and B at Timken station with 40 kA breakers		AEP (100%)
b3839.1	Replace 69 kV breaker C at Haviland station with a new 3000A 40 kA breaker		AEP (100%)
b3840.1	Replace Structures 382-66 and 382-63 on Darrah - East Huntington 34.5 kV line to bypass 24th Street station. Retire structures 1 through 5 on Twenty Fourth Street 34.5 kV extension. Retire 24th Street Station. Remove conductors from BASF Tap to BASF		AEP (100%)
b3843.1	Rebuild the underground portion of the Ohio University - West Clark 69 kV line, approximately 0.65 miles		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3847.1	Add a 765 kV breaker at Baker station for the reactor on the Broadford 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (70.68%) / EKPC (8.12%)/ PEPCO (21.20%)
b3847.2	Add two 765 kV breakers to the reactors at Broadford station on the Baker and Jacksons Ferry 765 kV lines		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (36.98%) / BGE (9.18%) / Dayton (0.04%) / DEOK (0.10%) / Dominion (40.81%) / EKPC (0.05%) / PEPCO (12.84%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3847.3	Add a 765 kV breaker to the reactor at Jefferson station on the Greentown 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (64.50%) / DEOK (27.02%) / EKPC (6.06%) / OVEC (2.42%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3851.1	Rebuild Allen – R.P. Mone 345 kV line (18.6 miles)		AEP (0.71%) / Dayton (99.28%) / OVEC (0.01%)
b3851.2	Rebuild R.P. Mone – Maddox Creek 345 kV line (9.4 miles)		AEP (78.50%) / Dayton (21.50%)
b3851.3	Replace 345 kV breakers 'B1' and 'B' at Maddox Creek station		AEP (80.97%) / Dayton (19.03%)
b3851.4	Replace two 345 kV breakers 'M' and 'M2' at East Lima station		AEP (80.97%) / Dayton (19.03%)
b3852.1	Connect and energize a second 765/345 kV bank at Vassell 765 kV station		AEP (89.17%) / Dayton (6.19%) / DEOK (4.57%) / OVEC (0.07%)
b3852.2	Replace 765 kV breaker D at Maliszewski station		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (68.04%) / ATSI (9.61%) / Dayton (1.92%) / DL (3.35%) / Dominion (17.06%) / EKPC (0.02%)
b3872.1	Adjust the tertiary tap on the Hartford 138/69/34.5 kV transformer 1 and on Hartford 138/69/12 kV transformer 4 to eliminate the high voltage issues and avoid circulating current		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3873.1	Install 12 MVAR 34.5 kV cap bank at Greenleaf station		AEP (100%)
b3875.1	Reconductor approximately 3.95 miles of ACSR 6/1 Penguin (4/0) on the Firebrick – Jefferson Switch 69 kV line with ACSR 556.6 26/7. Remote end (line setting) would need to be updated at Firebrick and Lick. Replace 600A switches at Jefferson and replace 477 AA 19 substation conductor at Firebrick		AEP (100%)
b3876.1	Install a 69 kV 11.5 MVAR capacitor bank at Richlands station with a circuit switcher		AEP (100%)
b3877.1	Replace station conductor and switches in the 345 kV yard at Beatty that are currently limiting the 345 kV lines to Adkins and Chenoweth		AEP (100%)
b3877.2	Upgrade 345 kV circuit breakers 'A' and 'A1' to 4000A 63 kA breakers at Adkins station along with some station conductor that is currently limiting the 345 kV line to Beatty		AEP (100%)
b3878.1	Upgrade 765 kV circuit breakers 'B' and 'B2' 'to 5000A 50 kA breakers at Marysville station. In addition, the project will upgrade the existing wavetrap towards Sorenson		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3879.1	Replace line conductor, approximately 0.11 mile of 4/0 ACSR 6/1 conductor with 556.5 26/7 between South Toronto and the South Toronto Tap		AEP (100%)
b3879.2	Upgrade the wave trap, CCVTs, switches, and station conductor at South Toronto station currently limiting the line to South Toronto Tap		AEP (100%)
b3880.1	At Beatty Road substation, install a 69 kV 23 MVAR capacitor bank along with the 69 kV Cap bank breaker		AEP (100%)
b3882.1	Replace 138 kV circuit breaker BB with higher fault current capable counterpart		AEP (100%)
b3883.1	69 kV station equipment, including relays, conductor, and switches, will be replaced at Haviland station in order to address identified overloads on the lines to North Van Wert and Cavett		AEP (100%)
b3884.1	Replace the 69 kV circuit breaker D at Van Wert with a 40 kA breaker		AEP (100%)
b3885.1	Replace 69 kV circuit breakers N and M at Schroyer Avenue station with higher fault current capable counterparts		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3886.1	Replace 69 kV circuit breaker 'A' along with disconnect switches at Benwood substation with a 40 kA Circuit Breaker		AEP (100%)
b3887.1	Replace Greentown 138 kV circuit switcher for Transformer No. 5 with a 138 kV 63 kA circuit breaker		AEP (100%)
b3888.1	Preform sag study and complete mitigations on the 138 kV line between East Leipsic and the AE2-072 tap (Lammer) to allow line's conductor to operate to its maximum operating temperature (MOT)		AEP (100%)
b3889.1	Project will replace limiting station equipment at Tiltonsville station to increase the rating on the branch to Windsor		AEP (100%)
b3890.1	Replace station conductor at South Coshocton station currently limiting the branch to Ohio Central		AEP (100%)
b3891.1	Project will perform relay upgrades at Kenny 138 kV to raise the CT & Relay thermal limits that are currently limiting the line to Roberts		AEP (100%)
b3892.1	Replace 69 kV circuit breakers A and S at Mount Vernon station with 40 kA breakers		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3894.1	Replace limiting station conductor at Tidd on the line to Carnegie (FE)		AEP (100%)
b3895.1	Replace existing 138 kV, 40 kA circuit switcher L at Jacksons Ferry Station with new 138 kV, 63 kA circuit breaker		AEP (100%)
b3896.1	Adjust the capacitor bank voltage settings to allow the cap bank to operate as needed under N-1-1 scenarios		AEP (100%)
b3897.1	Replace the 138 kV 40 kA circuit switcher XT8 with a 63 kA circuit breaker		AEP (100%)
b3898.1	Upgrade the CT thermal limit at Buchanan station on the Buchanan - Keen Mountain 138 kV line		AEP (100%)
b3911.1	Rebuild the existing 1.1 mile Canal - Gay 138 kV oil filled pipe-type underground line to address overloads on the existing cable utilizing 5000 MCM XLPE cable		AEP (100%)
b3912.1	Rebuild the existing 2.2-mile Canal-Mound St 138 kV oil filled pipe-type underground line to address overloads on the existing cable utilizing 5000 MCM XLPE cable		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3913.1	Rebuild 138 kV line section between Beatty and White Road stations (approximately 4.5 miles). Update remote end relay settings as needed		AEP (100%)
b3913.2	Rebuild 138 kV line section between White Road and Cyprus stations (approximately 3.34 miles). Update remote end relay settings as needed		AEP (100%)
b3919.1	Reconfigure Maliszewski 765 kV station from 2 breakers to a 6 breaker ring bus. Install a new 765/345 kV transformer. Establish new 345 kV breakeryard with 3 string breaker and a half to include a line exit to Hyatt and a line exit to Corridor. Loop the existing Hyatt – West Millersport 345 kV line into the new established 345 kV yard at the Maliszewski station		AEP (85.10%) / Dayton (9.33%) / DEOK (5.48%) / OVEC (0.09%)
b3919.2	Establish a 0.18 mile double circuit 345 kV line extension to cut the existing Hyatt – West Millersport 345 kV line in and out of Corridor station		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3919.3	Install three new 345 kV breakers at Corridor station in order to accommodate the cut in of the Hyatt - West Millersport 345 kV line		AEP (100%)
b3919.4	Reconductor 10.2 miles of Maliszewski – Corridor 345 kV line		AEP (100%)
b3919.5	Reconductor 4.75 miles of the existing Bokes Creek – Marysville 345 kV circuit. Update the associated relay settings		AEP (100%)
b3919.6	Rebuild 4.4 miles of the existing Marysville – Hyatt 345 kV double circuit line where it extends into Marysville station		AEP (100%)
b3919.7	Upgrade 345 kV breakers K and K1 along with associated switches and conductor to 5000A at Hyatt station		AEP (100%)
b3919.8	Upgrade the relaying and associated equipment at West Millersport station to coordinate with the cut in work to Corridor station		AEP (100%)
b3919.9	Upgrade 3000A 345 kV breaker 'L2' along with associated terminal elements to 5000A at Marysville		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3919.10	Rebuild approximately 19.0 miles of Hyatt – Marysville 345 kV line using 4-bundled 795 ACSR conductor Bold construction (This is an EOL rebuild)	AEP (100%)
b3936.1	AEP Zone 2024W1 P5 Solution #1: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgates: 2024-P5-AEP07, 2024-P5-AEP08	AEP (100%)
b3936.2	AEP Zone 2024W1 P5 Solution #2: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgates: 2024-P5-AEP03, 2024-P5-AEP04	AEP (100%)
b3936.3	AEP Zone 2024W1 P5 Solution #3: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgates: 2024-P5-AEP09, 2024-P5-AEP10, 2024-P5-AEP11, 2024-P5-AEP12	AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3936.4	AEP Zone 2024W1 P5 Solution #4: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgate: 2024-P5-AEP05	AEP (100%)
b3936.5	AEP Zone 2024W1 P5 Solution #5: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgate: 2024-P5-AEP01	AEP (100%)
b3936.7	AEP Zone 2024W1 P5 Solution #7: Install battery chargers & associated equipment at AEP substation. Addresses the following flowgate: 2024-P5-AEP06	AEP (100%)
b3945.1	Adjust Mullens 138 kV Cap Bank voltage high setting to 1.04. Adjust protection settings as needed at the station	AEP (100%)
b3946.1	Adjust existing Jarrett 138/46 kV transformer tap to 1:1 to boost voltages on the sub-transmission network	AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3946.2	Adjust the existing Hartland 46 kV cap bank voltage high setting to 1.04		AEP (100%)
b3947.1	Remove cans on existing Baileysville 46 kV cap bank to reduce it to 7.2 MVAR		AEP (100%)
b3948.1	Replace the existing 9.6 MVAR 69 kV capacitor bank at Johns Creek station with a 17.2 MVAR capacitor bank. Circuit switcher "AA" will also be replaced		AEP (100%)
b3949.1	Change transformer tap settings at Chauncey station to boost the sub-transmission voltage		AEP (100%)
b3949.2	Change the transformer tap settings at Huff Creek station to boost the sub-transmission voltage		AEP (100%)
b3950.1	Adjust existing Tazewell 138/34.5 kV transformer tap to 1:1 to help mitigate voltages on the 34.5 kV bus		AEP (100%)
b3951.1	To solve the voltage violations, a 69 kV circuit switcher and an 11.5 MVAR capacitor bank will be installed on the 69 kV bus at Falcon station. Falcon station will need to be expanded to fit the capacitor bank		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3952.1	Replace 138 kV, 3000A circuit breakers H and H1 with 4000A circuit breakers		AEP (100%)
b3953.1	Replace 138 kV circuit switcher XT3 with a higher fault current capable circuit breaker at New Carlisle		AEP (100%)
b3954.1	At Thomas Road, replace 69 kV circuit switcher XT1 with a 40 kA circuit switcher		AEP (100%)
b3955.1	Build approximately 0.8-mile 138 kV double circuit extension from Roberts - Wilson 138 kV line into the Milepost 138 kV substation		AEP (100%)
b3955.2	Install additional 2-138 kV circuit breakers at Milepost substation to allow for the Robert - Wilson 138 kV line to come into the milepost substation. DICM will need an expansion for additional relaying panels.		AEP (100%)
b3956.1	Upgrade 336.4 ACSR 26/7 station conductor at Galloway 69 kV		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3957.1	At Haviland substation, replace TR No. 4 with 138/69/12 kV 130 MVA bank, along with associated equipment such as the switch (600A), Sub cond 795 AAC 37 Str., and Sub cond 300 MCM CU bus equipment.		AEP (100%)
b3958.1	Perform sag study mitigations on approximately 1.4 miles of line from Str. 8 to Str. 21 to bring conductor to full 142 MVA SE rating		AEP (100%)
b3959.1	The line section overloading is roughly approximately 0.8 miles consisting of 336 ACSR 30/7 Oriole from structure 44 to Lick station. Reconductor limiting line conductor on the Lick-Ironman 69 kV circuit to match the rest of the line.		AEP (100%)
b3960.1	Replace 138 kV, 40 kA circuit breaker DD with higher fault-current-capable counterpart (63 kA). The new circuit breaker will have a larger footprint, which will require the shifting of nearby equipment.		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3961.1	Replace station terminal equipment: South Side Lima 34.5 kV replace 4/0 AAC, 7-Str. Replace 34.5 kV CB-L jumpers and 34.5 kV Sterling line riser		AEP (100%)
b3962.1	Replace 138 kV circuit breakers CB-H014F2 and CB-H014F5 with 63 kA fault-current-capable breakers		AEP (100%)
b3963.1	Replace 138 kV circuit breakers 102, 103 and circuit switcher XT4 with 63 kA fault-current-capable breakers		AEP (100%)
b3964.1	The 138 kV circuit switcher XT3 will be replaced with a 63 kA breaker		AEP (100%)
b3965.1	Replace 138 kV circuit switchers XT1, XT3, XT2 and XT4 with 63 kA fault-current-capable counterpart		AEP (100%)
b3966.1	Replace 138 kV circuit breakers A, AA, D, E, F, XT1 and XT2 with 63 kA fault-current-capable counterpart. Reroute one line entrance in the station to make more room for the larger breakers		AEP (100%)
b3967.1	Replace the existing Cambridge 34.5 kV circuit breaker F with a 40 kA, 3000A unit		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3968.1	Replace North Newark TR#1 with a 90 MVA bank. DICM expansion will be required. Replace motor operators on high-side switch "Z." Install two 138 kV disconnects on existing 138 kV lattice box bay. Install two 69 kV disconnects on existing 69 kV H-frame structure		AEP (100%)
b3969.1	Replace Findlay Center transformer No. 1 with a 138/69/34.5 90 MVA Unit. Replace the TR1 LS disconnect switch		AEP (100%)
b3970.1	Rebuild line: ~2.87 miles Kenton-South Kenton 69 kV		AEP (100%)
b3971.1	At Haviland, reconductor bus No. 1 Sub cond 500 MCM CU 37 Str toward Haviland bus No. 2 and reconductor Haviland bus No. 2 500 KCM CU, 37-Str. and 795 KCM AAC, 37-Str. toward Timber SW 138 kV		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3972.1	Perform a ratings study and clearance mitigation on the ~5.55-mile section of sag derated 556.5 ACSR 26/7 DOVE conductor (East Lima-STR 28) between the East Lima-Haviland 138 kV circuit on the East Lima-West Lima 138 kV line		AEP (100%)
b3974.1	Replace circuit breaker R with a new 69 kV, 40 kA circuit breaker		AEP (100%)
b3975.1	Install a new 138/69 kV transformer at Catawba station with a high-side circuit switcher and a low-side circuit breaker		AEP (100%)
b3975.2	Upgrade one 69 kV breaker at Huntington Court		AEP (100%)
b4000.1	Add one 765 kV breaker at Amos Substation to expand the breaker and a half scheme to accommodate the new Amos – Welton Spring 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.200	Broadford 765 kV Upgrade: Replace Jackson's Ferry CB Q2		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (21.60%) / APS (12.36%) / BGE (8.28%) / Dominion (46.81%) / PEPCO (10.95%)
b4000.201	Smith Mountain 138 kV Upgrade: Replace 795 KCM AAC, 37-Str. 795 KCM AAC, 37-Str. PH A B2S1 B2S2 BS1 BS2		AEP (100%)
b4000.202	Reconductor 34 miles of Smith Mountain - Redeye 138 kV line		AEP (100%)
b4000.203	Reconductor 34 miles of Redeye - Candler's Mountain 138 kV line		AEP (100%)
b4000.204	Reconductor 34 miles of Candler's Mountain - Opossum Creek 138 kV line		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.205	Candler's Mountain 138 kV: Replace 1590 KCM AAC, 61-Str. Replace MOAB "Y" SMITH MTN line		AEP (100%)
b4000.206	Opposum Creek 138 kV: Replace Opossum Creek switch		AEP (100%)
b4000.207	Leesville Station Upgrade 138 kV: Replace 795 KCM AAC, 37-Str. IPS Sch. 40 1272 KCM AAC, 61-Str. 1272 KCM AAC, 61-Str. PH A,B,C ALTA VISTA CB-A BUS DISC ALTA VISTA CB-A LINE DISC Wavetrap (1200A) relay thermal Limit 1356 amps		AEP (100%)
b4000.208	Otter 138 kV Station Upgrade: Replace 795 KCM AAC, 37-Str		AEP (100%)
b4000.209	Reconductor 14.4 miles of Altavista - Otter 138 kV line		AEP (100%)
b4000.210	Reconductor 14.4 miles of Otter - Johnson Mountain 138 kV line		AEP (100%)
b4000.211	Reconductor 14.4 miles of Johnson Mountain - New London 138 kV line		AEP (100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4000.251	Replace the wave trap and upgrade the relay at Cloverdale 765 kV substation	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (3.00%) / APS (8.96%) / BGE (6.53%) / Dominion (72.75%) / PEPCO (8.76%)
b4000.252	Replace the wave trap and upgrade the relay at Joshua Falls 765 kV substation	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (3.00%) / APS (8.96%) / BGE (6.53%) / Dominion (72.75%) / PEPCO (8.76%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.359	Add (2) 765 kV breakers at Joshua Falls substation. Substation expansion is required to add the additional breakers		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.11%) / BGE (6.49%) / Dominion (75.72%) / PEPCO (8.68%)
b4003.3	Relay Settings at College Corner station needed due to Duke rebuilding their College Corner-Collinsville 138 kV line section		AEC (0.12%) / BGE (1.23%) / DEOK (88.39%) / DL (0.41%) / Dominion (6.64%) / DPL (0.33%) / JCPL (0.04%) / ME (0.25%) / OVEC (0.25%) / PECO (0.49%) / PENELEC (0.04%) / PEPCO (1.39%) / PPL (0.42%)
b4026.1	Rebuild approximately 3.5 miles of 69 kV line from Platter Creek to Sherwood station		AEC (0.42%) / AEP (43.74%) / ATSI (22.83%) / Dayton (9.04%) / DEOK (0.31%) / DL (2.53%) / Dominion (14.56%) / DPL (0.44%) / EKPC (0.93%) / JCPL (1.00%) / NEPTUNE* (0.11%) / OVEC (0.07%) / PECO (1.46%) / PENELEC (0.64%) / PSEG (1.85%) / RE (0.07%)
b4026.2	Rebuild approximately 11.1 miles of 69 kV line from Sherwood to Auglaize station		AEC (0.47%) / AEP (37.14%) / ATSI (25.51%) / ComEd (0.01%) / Dayton (10.10%) / DEOK (0.34%) / DL (2.82%) / Dominion (16.27%) / DPL (0.49%) / EKPC (1.04%) / JCPL (1.12%) / NEPTUNE* (0.13%) / OVEC (0.08%) / PECO (1.63%) / PENELEC (0.72%) / PSEG (2.06%) / RE (0.07%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4027.1	Sag study the Smith Mountain-Moneta 138 kV line. Approximately 14 structures will need to be added in existing rights-of-way to increase the sag along the existing centerline such that the higher requested ampacity can be achieved along the corridor and maintain safety clearances		AEC (0.23%) / AEP (32.88%) / APS (10.40%) / ATSI (6.36%) / BGE (6.66%) / ComEd (0.73%) / Dayton (2.80%) / DEOK (3.33%) / DL (1.49%) / Dominion (13.06%) / DPL (0.22%) / EKPC (0.20%) / JCPL (0.74%) / ME (0.31%) / NEPTUNE* (0.08%) / OVEC (0.11%) / PECO (0.74%) / PENELEC (0.24%) / PEPCO (12.05%) / PPL (5.83%) / PSEG (1.49%) / RE (0.05%)
b4027.2	Replace the 2" IPS Sch. 40 conductor with 4" IPS Sch. 40 conductor at Smith Mountain station on the Smith Mountain-Rock Castle branch allowing the branch to exceed a summer emergency rating of 1765 A		AEC (0.24%) / AEP (42.72%) / APS (8.02%) / ATSI (6.75%) / BGE (5.14%) / ComEd (0.77%) / Dayton (2.97%) / DEOK (3.53%) / DL (1.58%) / Dominion (10.07%) / DPL (0.23%) / EKPC (0.21%) / JCPL (0.78%) / ME (0.32%) / NEPTUNE* (0.09%) / OVEC (0.12%) / PECO (0.78%) / PENELEC (0.26%) / PEPCO (9.29%) / PPL (4.49%) / PSEG (1.58%) / RE (0.06%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4028.1	Rebuild 2.3 miles of the Mound Street - St Clair Avenue 138 kV UG line with 5000 KCM XLPE cable		AEC (0.14%) / AEP (85.94%) / ATSI (5.45%) / ComEd (1.83%) / DL (1.08%) / Dominion (1.23%) / DPL (0.07%) / EKPC (0.43%) / JCPL (0.62%) / ME (0.21%) / NEPTUNE* (0.07%) / PECO (0.49%) / PENELEC (0.19%) / PEPCO (0.85%) / PSEG (1.35%) / RE (0.05%)
b4035.1	Reconductor one span of the Smith Mountain - Museville 138 kV line with 2-556 ACSR conductor		AEP (100%)
b4035.2	Replace Smith Mountain 138 kV switches CS1, CS2 and C1S2 with 3000A switches and replace switch jumpers with 2-1272 AAC		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.5	Upgrade Mountaineer terminal of Mountaineer - Belmont 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.07%) / AEP (3.16%) / APS (3.55%) / ATSI (28.79%) / BGE (0.62%) / ComEd (2.21%) / Dayton (0.87%) / DEOK (1.59%) / DL (11.36%) / Dominion (16.32%) / DPL (0.78%) / EKPC (0.34%) / JCPL (4.08%) / ME (2.26%) / NEPTUNE* (0.44%) / OVEC (0.03%) / PECO (3.97%) / PENELEC (1.37%) / PEPCO (9.62%) / PPL (0.47%) / PSEG (6.85%) / RE (0.25%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4036.6	Upgrade Belmont terminal of Mountaineer - Belmont 765 kV line	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.07%) / AEP (3.16%) / APS (3.55%) / ATSI (28.79%) / BGE (0.62%) / ComEd (2.21%) / Dayton (0.87%) / DEOK (1.59%) / DL (11.36%) / Dominion (16.32%) / DPL (0.78%) / EKPC (0.34%) / JCPL (4.08%) / ME (2.26%) / NEPTUNE* (0.44%) / OVEC (0.03%) / PECO (3.97%) / PENELEC (1.37%) / PEPCO (9.62%) / PPL (0.47%) / PSEG (6.85%) / RE (0.25%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.7	Kammer substation work for new Kammer - Buttermilk Falls 765 kV line termination		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.33%) / AEP (2.07%) / APS (16.49%) / ATSI (13.74%) / BGE (1.06%) / ComEd (0.04%) / Dayton (0.46%) / DEOK (0.60%) / Dominion (17.28%) / DPL (1.94%) / EKPC (0.16%) / JCPL (8.19%) / ME (0.25%) / NEPTUNE* (0.88%) / OVEC (0.01%) / PECO (8.84%) / PENELEC (0.01%) / PEPCO (10.67%) / PPL (1.93%) / PSEG (12.59%) / RE (0.46%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.1	Greentown 765 kV substation scope (AEP): Create a new 765 KV line position with three 100 MVAR single-phase reactors. Install two 765 kV circuit breakers		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.49%) / AEP (57.78%) / ATSI (10.07%) / BGE (1.22%) / Dayton (2.82%) / DEOK (1.49%) / DL (2.73%) / Dominion (17.64%) / DPL (0.83%) / JCPL (0.96%) / NEPTUNE* (0.10%) / PECO (1.84%) / PEPCO (0.83%) / PSEG (1.16%) / RE (0.04%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.2	Greentown - Teddy 765 kV line: Construct 60-mile 765 kV AC overhead transmission line between the existing Greentown 765 kV substation and the proposed Teddy 765 kV substation. (AEP Portion). The total line length is 137 miles of the Greentown to Teddy 765 kV line	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.49%) / AEP (57.78%) / ATSI (10.07%) / BGE (1.22%) / Dayton (2.82%) / DEOK (1.49%) / DL (2.73%) / Dominion (17.64%) / DPL (0.83%) / JCPL (0.96%) / NEPTUNE* (0.10%) / PECO (1.84%) / PEPCO (0.83%) / PSEG (1.16%) / RE (0.04%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.9	Marysville 765 kV substation scope: Create a new 765 kV line position. Install two 765 kV circuit breakers. Create a new 765 kV line position to relocate the existing 765 kV Sorenson line. Install one 765 kV circuit breaker. Add one 765/345 kV, 2250 MVA transformer		AEP (48.19%) / APS (1.76%) / ATSI (18.97%) / Dayton (24.60%) / DEOK (5.45%) / DL (0.50%) / EKPC (0.27%) / PENELEC (0.26%)
b4068.10	Marysville 765 kV substation: Add one 765 kV STATCOM		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.15	Teddy - Cole single-circuit 345 kV: Install second circuit on the vacant side of the existing 9.7-mile 345 kV AC overhead transmission line between the existing Cole 345 kV Substation and the existing Beatty 345 kV substation. The total length of Teddy - Cole 345 kV circuit is 41.7 miles		AEC (0.14%) / AEP (71.90%) / ATSI (6.72%) / BGE (0.53%) / Dayton (7.26%) / DEOK (4.58%) / DL (1.09%) / Dominion (6.15%) / DPL (0.27%) / JCPL (0.21%) / NEPTUNE* (0.02%) / OVEC (0.03%) / PECO (0.56%) / PEPCO (0.43%) / PSEG (0.11%)
b4068.16	Cole 345 kV substation scope: Create a new 345 kV line position to interconnect the new 345 kV Teddy line		AEC (0.14%) / AEP (71.90%) / ATSI (6.72%) / BGE (0.53%) / Dayton (7.26%) / DEOK (4.58%) / DL (1.09%) / Dominion (6.15%) / DPL (0.27%) / JCPL (0.21%) / NEPTUNE* (0.02%) / OVEC (0.03%) / PECO (0.56%) / PEPCO (0.43%) / PSEG (0.11%)
b4068.17	Beatty 345 kV substation scope: Create a new 345 kV line position to interconnect the new 345 kV Teddy line. Install two 345 kV circuit breakers		AEC (0.07%) / AEP (52.14%) / APS (0.21%) / ATSI (5.33%) / BGE (1.11%) / Dayton (17.06%) / DEOK (15.21%) / DL (0.72%) / Dominion (5.65%) / DPL (0.24%) / JCPL (0.03%) / ME (0.17%) / OVEC (0.16%) / PECO (0.36%) / PENELEC (0.11%) / PEPCO (1.26%) / PPL (0.17%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.18	Guernsey 765 kV substation scope: Create a new 765 kV line position to interconnect the new 765 kV Conesville line. Install one 765 kV circuit breaker		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.03%) / AEP (66.51%) / APS (5.68%) / ATSI (0.18%) / BGE (1.32%) / ComEd (0.60%) / Dayton (8.97%) / DEOK (9.44%) / DL (0.20%) / Dominion (0.84%) / DPL (0.04%) / EKPC (1.30%) / JCPL (0.09%) / ME (0.76%) / NEPTUNE* (0.01%) / OVEC (0.15%) / PECO (0.13%) / PENELEC (0.03%) / PEPCO (2.69%) / PPL (0.89%) / PSEG (0.13%) / RE (0.01%)
b4068.20	West Millersport substation scope: Construct a new 765 kV West Millersport yard. Install four circuit breakers. Install one 765/345 kV, 2250 MVA transformer. Install one 345 kV circuit breaker		AEP (81.91%) / APS (2.41%) / ATSI (2.81%) / Dayton (6.55%) / DEOK (6.22%) / OVEC (0.10%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.21	Ohio Central 345 kV scope: Retire a segment of the Bixby to Ohio Central 345 kV line and install approximately 3 miles of greenfield single-circuit 345 kV line from structure 284 to West Millersport substation		AEC (0.03%) / AEP (60.02%) / APS (2.20%) / ATSI (0.44%) / BGE (0.16%) / ComEd (0.03%) / Dayton (15.33%) / DEOK (17.67%) / DL (0.21%) / Dominion (0.84%) / DPL (0.04%) / EKPC (0.04%) / JCPL (0.07%) / ME (0.52%) / NEPTUNE* (0.01%) / OVEC (0.22%) / PECO (0.10%) / PENELEC (0.02%) / PEPCO (0.89%) / PPL (1.05%) / PSEG (0.11%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.22	Ohio Center - Conesville 345 kV: Wreck Ohio Center - Conesville 345 kV circuit to facilitate the Conesville - West Millersport 765 kV line		AEC (0.80%) / AEP (23.83%) / APS (4.43%) / ATSI (14.12%) / BGE (1.93%) / ComEd (0.31%) / Dayton (6.01%) / DEOK (7.71%) / DL (5.83%) / Dominion (16.68%) / DPL (0.84%) / EKPC (1.27%) / JCPL (2.51%) / ME (1.62%) / NEPTUNE* (0.27%) / OVEC (0.14%) / PECO (3.00%) / PENELEC (0.16%) / PEPCO (3.25%) / PPL (1.32%) / PSEG (3.83%) / RE (0.14%)
b4068.23	Ohio Center - Bixby 345 kV: Wreck part of Ohio Center - Bixby 345 kV circuit around West Millersport 345 kV to facilitate the Conesville - West Millersport 765 kV line		AEC (0.80%) / AEP (23.83%) / APS (4.43%) / ATSI (14.12%) / BGE (1.93%) / ComEd (0.31%) / Dayton (6.01%) / DEOK (7.71%) / DL (5.83%) / Dominion (16.68%) / DPL (0.84%) / EKPC (1.27%) / JCPL (2.51%) / ME (1.62%) / NEPTUNE* (0.27%) / OVEC (0.14%) / PECO (3.00%) / PENELEC (0.16%) / PEPCO (3.25%) / PPL (1.32%) / PSEG (3.83%) / RE (0.14%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.24	Ohio Central 138 kV scope: Extend existing Ohio Central 345 kV Extension by one span to cut into the existing Conesville - Newark Center 138 kV line to loop the existing Conesville – Newark Center 138 kV Line into Ohio Central Station by installing four new three-pole steel pole structures		AEC (0.02%) / AEP (80.98%) / BGE (1.14%) / ComEd (0.22%) / Dayton (5.54%) / DEOK (3.86%) / Dominion (4.70%) / DPL (0.18%) / EKPC (0.67%) / ME (0.21%) / OVEC (0.05%) / PECO (0.27%) / PEPCO (1.30%) / PPL (0.86%)
b4068.25	Bixby 345 kV substation scope: New relaying at Bixby 345 kV substation		AEP (100%)
b4068.27	West Millersport - Kirk 345 kV: Rebuild 6.37-mile section of the double-circuit West Millersport - Kirk 345 kV circuit		AEP (86.23%) / APS (0.54%) / ComEd (0.58%) / Dayton (6.85%) / DEOK (5.29%) / EKPC (0.19%) / ME (0.03%) / OVEC (0.02%) / PENELEC (0.11%) / PPL (0.16%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.28	Hyatt - Maliszewski 345 and 138 kV rebuild: Rebuild 5.25-mile section of the 345 kV circuit from Hyatt Station to Maliszewski station that shares tower with 138 kV line	AEC (0.35%) / APS (4.91%) / ATSI (23.54%) / BGE (1.04%) / ComEd (0.85%) / Dayton (33.81%) / DEOK (16.63%) / DL (1.73%) / Dominion (12.58%) / DPL (0.64%) / EKPC (0.34%) / JCPL (0.57%) / ME (0.02%) / NEPTUNE* (0.06%) / OVEC (0.07%) / PECO (1.38%) / PENELEC (0.17%) / PEPCO (0.73%) / PPL (0.20%) / PSEG (0.37%) / RE (0.01%)
b4068.29	Hayden - Cole 345 kV: Rebuild 7.89-mile of Beatty - Hayden 345 kV line	AEC (0.23%) / AEP (80.77%) / ATSI (7.38%) / ComEd (0.58%) / DL (1.41%) / Dominion (6.18%) / DPL (0.29%) / EKPC (0.29%) / JCPL (0.64%) / NEPTUNE* (0.07%) / PECO (0.80%) / PENELEC (0.19%) / PSEG (1.13%) / RE (0.04%)
b4068.30	Newark 138 kV Center station scope: Replace wave trap and limiting bus conductor at Newark Center substation	AEP (83.28%) / ATSI (0.03%) / BGE (1.43%) / ComEd (0.13%) / Dayton (6.82%) / DEOK (7.50%) / DL (0.01%) / Dominion (0.01%) / DPL (0.02%) / EKPC (0.65%) / OVEC (0.12%)
b4068.31	Allen 138 kV substation scope: Replace bus conductor at Allen station	AEP (100%)
b4068.32	Roberts - Kenny 138 kV rebuild: Retire 3.18 miles of the Roberts - Kenny 138 kV underground line and install new underground cable for increased require ratings	AEC (0.17%) / AEP (89.52%) / ATSI (0.92%) / BGE (0.39%) / DL (1.07%) / Dominion (5.88%) / DPL (0.29%) / JCPL (0.36%) / NEPTUNE* (0.04%) / PECO (0.66%) / PEPCO (0.24%) / PSEG (0.44%) / RE (0.02%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.33	Wilson - Fifth Avenue 138 kV line: Perform sag remediation on the Wilson - Fifth Avenue 138 kV line		AEC (0.17%) / AEP (91.08%) / ATSI (0.12%) / BGE (0.05%) / ComEd (0.18%) / DL (1.07%) / Dominion (5.17%) / DPL (0.23%) / EKPC (0.19%) / JCPL (0.40%) / NEPTUNE* (0.05%) / PECO (0.58%) / PENELEC (0.05%) / PSEG (0.64%) / RE (0.02%)
b4068.34	Bethel 138 kV substation scope: Replace one 138 kV circuit breaker		AEP (100%)
b4068.35	OSU 138 kV station scope: Replace one 138 kV circuit breaker		AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.36	Hess 138 kV substation scope: Replace one 138 kV circuit breaker to alleviate CT thermal limit		AEC (0.17%) / AEP (91.08%) / ATSI (0.12%) / BGE (0.05%) / ComEd (0.18%) / DL (1.07%) / Dominion (5.17%) / DPL (0.23%) / EKPC (0.19%) / JCPL (0.40%) / NEPTUNE* (0.05%) / PECO (0.58%) / PENELEC (0.05%) / PSEG (0.64%) / RE (0.02%)
b4068.37	South Kenton 138 kV substation scope: Replace line-side disconnect switches and bus tie switch on East Lima line at South Kenton substation		AEP (100%)
b4068.38	Meadow Lake 345 kV substation scope: Replace four 345 kV circuit breakers		AEC (0.11%) / AEP (56.47%) / ATSI (6.73%) / BGE (0.26%) / ComEd (31.94%) / DL (0.82%) / DPL (0.05%) / JCPL (0.83%) / NEPTUNE* (0.09%) / PECO (0.27%) / PENELEC (0.15%) / PSEG (2.20%) / RE (0.08%)
b4068.39	Conesville 765 kV substation scope: Upgrade the existing Conesville substation to include a 765 kV yard and expand the 345 kV yard. Install six 765 kV circuit breakers. Install one 765/345 kV, 2250 MVA transformer. Install one circuit 345 kV circuit breaker. Replace Wave trap and circuit switcher in 138 kV yard.		AEP (79.27%) / APS (3.40%) / ATSI (4.28%) / ComEd (0.60%) / Dayton (6.89%) / DEOK (5.12%) / EKPC (0.39%) / OVEC (0.05%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.40	Conesville - West Millersport 765 kV: Construct a new 49.1-miles single-circuit 765 kV AC overhead transmission line between the new Conesville 765 kV substation and the new West Millersport 765 kV substation	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.80%) / AEP (23.83%) / APS (4.43%) / ATSI (14.12%) / BGE (1.93%) / ComEd (0.31%) / Dayton (6.01%) / DEOK (7.71%) / DL (5.83%) / Dominion (16.68%) / DPL (0.84%) / EKPC (1.27%) / JCPL (2.51%) / ME (1.62%) / NEPTUNE* (0.27%) / OVEC (0.14%) / PECO (3.00%) / PENELEC (0.16%) / PEPCO (3.25%) / PPL (1.32%) / PSEG (3.83%) / RE (0.14%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.41	Adkins 765 kV substation scope: Construct a 765 KV yard at Adkins substation. Install seven 765 kV circuit breakers. Install three 100 MVAR single-phase reactors on each 765 kV line	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (100%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.42	Ohio Central Station Scope: Install two new 138 kV circuit breakers		AEC (0.02%) / AEP (81.19%) / BGE (1.13%) / ComEd (0.19%) / Dayton (5.55%) / DEOK (3.82%) / Dominion (4.46%) / DPL (0.18%) / EKPC (0.67%) / ME (0.23%) / OVEC (0.05%) / PECO (0.32%) / PEPCO (1.32%) / PPL (0.87%)
b4068.43	Kammer Dumont structures: Lower the existing Kammer to Dumont 765 kV line between structure 169 and 170 to facilitate crossing the proposed Conesville to Guernsey 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** AEC (0.03%) / AEP (69.93%) / APS (4.40%) / ATSI (0.13%) / BGE (0.10%) / ComEd (1.43%) / Dayton (10.20%) / DEOK (9.16%) / DL (0.15%) / Dominion (0.79%) / DPL (0.04%) / EKPC (1.23%) / JCPL (0.06%) / ME (0.46%) / NEPTUNE* (0.01%) / OVEC (0.10%) / PECO (0.10%) / PENELEC (0.02%) / PEPCO (1.05%) / PPL (0.53%) / PSEG (0.08%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.44	Ohio Central - Fostoria Central structure: Remove structure 10 and replace with lower structure to lower the line		AEC (0.10%) / AEP (4.49%) / APS (5.18%) / ATSI (57.30%) / BGE (2.90%) / ComEd (3.64%) / Dayton (7.11%) / DEOK (0.28%) / DL (0.61%) / Dominion (10.60%) / DPL (0.57%) / EKPC (0.19%) / JCPL (0.46%) / ME (0.60%) / NEPTUNE* (0.04%) / OVEC (0.05%) / PECO (0.65%) / PENELEC (0.52%) / PEPCO (3.15%) / PPL (0.93%) / PSEG (0.61%) / RE (0.02%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4068.45	Gavin - Marysville structures: Raise the existing Gavin to Marysville 765 kV line between structures 358 and 359 to facilitate crossing the proposed Teddy to Beatty 345kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.11%) / AEP (58.53%) / APS (2.20%) / ATSI (4.14%) / BGE (0.78%) / ComEd (4.54%) / Dayton (13.11%) / DEOK (8.38%) / DL (0.33%) / Dominion (4.84%) / DPL (0.24%) / EKPC (0.92%) / JCPL (0.11%) / ME (0.13%) / NEPTUNE* (0.01%) / OVEC (0.05%) / PECO (0.43%) / PENELEC (0.04%) / PEPCO (0.85%) / PPL (0.25%) / PSEG (0.01%)
b4068.47	Beatty - Hayden structures: Lower the existing Beatty - Hayden 345kV line between structures 2 and 3 to facilitate crossing the proposed Teddy – Beatty 345 kV line		AEC (0.22%) / AEP (79.69%) / ATSI (6.51%) / ComEd (2.36%) / DL (1.33%) / Dominion (4.46%) / DPL (0.22%) / EKPC (1.51%) / JCPL (0.77%) / ME (0.30%) / NEPTUNE* (0.09%) / PECO (0.75%) / PENELEC (0.23%) / PSEG (1.51%) / RE (0.05%)

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Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.48	Marysville 765 kV substation: Add two 345 KV capacitor banks		AEP (100%)
b4068.49	Hyatt - Maliszewski 345 & 138 kV rebuild: Rebuild 5.25-mile section of the 138 kV circuit from Hyatt Station to Maliszewski Station that shares tower with 345 kV line		AEP (63.20%) / APS (2.56%) / ATSI (6.18%) / Dayton (18.30%) / DEOK (9.67%) / OVEC (0.09%)

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SCHEDULE 12 – APPENDIX A

(20) Virginia Electric and Power Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1698.7	Replace Loudoun 230 kV breaker '203052' with 63 kA rating		Dominion (100%)
b1696.1	Replace the Idylwood 230 kV '25112' breaker with 50 kA breaker		Dominion (100%)
b1696.2	Replace the Idylwood 230 kV '209712' breaker with 50 kA 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2368	Replace the Brambleton 230 kV breaker '209502' with 63 kA breaker		Dominion (100%)
b2369	Replace the Brambleton 230 kV breaker '213702' with 63 kA breaker		Dominion (100%)
b2370	Replace the Brambleton 230 kV breaker 'H302' with 63 kA 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 (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (83.33%) / PEPCO (16.67%)
b2397	Replace the Beaumeade 230 kV breaker '2079T2116' with 63 kA		Dominion (100%)
b2398	Replace the Beaumeade 230 kV breaker '2079T2130' with 63 kA		Dominion (100%)
b2399	Replace the Beaumeade 230 kV breaker '208192' with 63 kA		Dominion (100%)
b2400	Replace the Beaumeade 230 kV breaker '209592' with 63 kA		Dominion (100%)
b2401	Replace the Beaumeade 230 kV breaker '211692' with 63 kA		Dominion (100%)
b2402	Replace the Beaumeade 230 kV breaker '227T2130' with 63 kA		Dominion (100%)

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.

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2403	Replace the Beaumeade 230 kV breaker '274T2130' with 63 kA		Dominion (100%)
b2404	Replace the Beaumeade 230 kV breaker '227T2095' with 63 kA		Dominion (100%)
b2405	Replace the Pleasant view 230 kV breaker '203T274' with 63 kA		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 50 kA		Dominion (100%)
b2443.2	Replace the Ox 230 kV breaker '206342' with 63 kA 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 (99.64%) / PEPCO (0.36%)
b2443.7	Replace 19 63 kA 230 kV breakers with 19 80 kA 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2471	Replace Midlothian 500 kV breaker 563T576 and motor operated switches with 3 breaker 500 kV ring bus. Terminate Lines # 563 Carson – Midlothian, #576 Midlothian –North Anna, Transformer #2 in new ring		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b2504	Rebuild 115 kV Line #32 from Halifax-South Boston (6 miles) for min. of 240 MVA and transfer Welco tap to Line #32. Moving Welco to Line #32 requires disabling auto-sectionalizing scheme		Dominion (100%)
b2505	Install structures in river to remove the 115 kV #65 line (Whitestone-Harmony Village 115 kV) from bridge and improve reliability of the line		Dominion (100%)
b2542	Replace the Loudoun 500 kV 'H2T502' breaker with a 50 kA breaker		Dominion (100%)
b2543	Replace the Loudoun 500 kV 'H2T584' breaker with a 50 kA breaker		Dominion (100%)
b2565	Reconductor wave trap at Carver Substation with a 2000A wave trap		Dominion (100%)
b2566	Reconductor 1.14 miles of existing line between ACCA and Hermitage and upgrade associated terminal equipment		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2582	Rebuild the Elmont – Cunningham 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: BGE (4.97%) / Dominion (88.16%) / PEPCO (6.87%)
b2583	Install 500 kV breaker at Ox Substation to remove Ox Tx#1 from H1T561 breaker failure outage		Dominion (100%)
b2584	Relocate the Bremo load (transformer #5) to #2028 (Bremo-Charlottesville 230 kV) line and Cartersville distribution station to #2027 (Bremo-Midlothian 230 kV) line		Dominion (100%)
b2585	Reconductor 7.63 miles of existing line between Cranes and Stafford, upgrade associated line switches at Stafford		PEPCO (100%)
b2620	Wreck and rebuild the Chesapeake – Deep Creek – Bowers Hill – Hodges Ferry 115 kV line; minimum rating 239 MVA normal/emergency, 275 MVA load dump rating		Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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%)
b2654.4	Install a 2nd 224 MVA 230/115 kV transformer at Hathaway		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2665	Rebuild the Cunningham – Dooms 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (86.24%) / PEPCO (13.76%)
b2686	Pratts Area Improvement		Dominion (100%)
b2686.1	Build a 230 kV line from Remington Substation to Gordonsville Substation utilizing existing ROW		Dominion (100%)
b2686.2	Install a 3rd 230/115 kV transformer at Gordonsville Substation		Dominion (100%)
b2686.3	Upgrade Line 2088 between Gordonsville Substation and Louisa CT Station		Dominion (100%)
b2686.4	Replace the Remington CT 230 kV breaker "2114T2155" with a 63 kA breaker		Dominion (100%)
b2686.11	Upgrading sections of the Gordonsville – Somerset 115 kV circuit		Dominion (100%)
b2686.12	Upgrading sections of the Somerset – Doubleday 115 kV circuit		Dominion (100%)
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%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(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 50 kA 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%)

* Neptune Regional Transmission System, LLC
** East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2744	Rebuild the Carson – Rogers Rd 500 kV circuit		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b2745	Rebuild 21.32 miles of existing line between Chesterfield – Lakeside 230 kV		Dominion (100%)
b2746.1	Rebuild Line #137 Ridge Rd – Kerr Dam 115 kV, 8.0 miles, for 346 MVA summer emergency rating		Dominion (100%)
b2746.2	Rebuild Line #1009 Ridge Rd – Chase City 115 kV, 9.5 miles, for 346 MVA summer emergency rating		Dominion (100%)
b2746.3	Install a second 4.8 MVAR capacitor bank on the 13.8 kV bus of each transformer at Ridge Rd		Dominion (100%)
b2747	Install a Motor Operated Switch and SCADA control between Dominion's Gordonsville 115 kV bus and FirstEnergy's 115 kV line		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2757	Install a +/-125 MVAr Statcom at Colington 230 kV		Dominion (100%)
b2758	Rebuild Line #549 Dooms – Valley 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: Dominion (100%)
b2759	Rebuild Line #550 Mt. Storm – Valley 500 kV		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: APS (95.57%) / DL (0.44%) / Dominion (3.99%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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 115 kV		Dominion (100%)
b2815	Build a new Pinewood 115 kV switching station at the tap serving North Doswell DP with a 115 kV four breaker ring bus		Dominion (100%)
b2842	Update the nameplate for Mount Storm 500 kV "57272" to be 50 kA breaker		Dominion (100%)
b2843	Replace the Mount Storm 500 kV "G2TY" with 50 kA breaker		Dominion (100%)
b2844	Replace the Mount Storm 500 kV "G2TZ" with 50 kA breaker		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2845	Update the nameplate for Mount Storm 500 kV "G3TSX1" to be 50 kA breaker		Dominion (100%)
b2846	Update the nameplate for Mount Storm 500 kV "SX172" to be 50 kA breaker		Dominion (100%)
b2847	Update the nameplate for Mount Storm 500 kV "Y72" to be 50 kA breaker		Dominion (100%)
b2848	Replace the Mount Storm 500 kV "Z72" with 50 kA 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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 (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **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

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2960.1	Replace fixed series capacitors on 500 kV Line #547 at Lexington		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2960.2	Replace fixed series capacitors on 500 kV Line #548 at Valley		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b2961	Rebuild approximately 3 miles of Line #205 & Line #2003 from Chesterfield to Locks & Poe respectively		Dominion (100%)
b2962	Split Line #227 (Brambleton – Beaumeade 230 kV) and terminate into existing Belmont substation		Dominion (100%)
b2962.1	Replace the Beaumeade 230 kV breaker "274T2081" with 63 kA breaker		Dominion (100%)
b2962.2	Replace the NIVO 230 kV breaker "2116T2130" with 63 kA breaker		Dominion (100%)
b2963	Reconductor the Woodbridge to Occoquan 230 kV line segment of Line #2001 with 1047 MVA conductor and replace line terminal equipment at Possum Point, Woodbridge, and Occoquan		Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2978	Install 2-125 MVAR STATCOMs at Rawlings and 1-125 MVAR STATCOM at Clover 500 kV substations		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b2980	Rebuild 115 kV Line #43 between Staunton and Harrisonburg (22.8 miles) to current standards with a summer emergency rating of 261 MVA at 115 kV		Dominion (100%)
b2981	Rebuild 115 kV Line #29 segment between Fredericksburg and Aquia Harbor to current 230 kV standards (operating at 115 kV) utilizing steel H-frame structures with 2-636 ACSR to provide a normal continuous summer rating of 524 MVA at 115 kV (1047 MVA at 230 kV)		Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3019	Rebuild 500 kV Line #552 Bristers to Chancellor – 21.6 miles long		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: Dominion (100%)
b3019.1	Update the nameplate for Morrisville 500 kV breaker "H1T594" to be 50 kA		Dominion (100%)
b3019.2	Update the nameplate for Morrisville 500 kV breaker "H1T545" to be 50 kA		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3020	Rebuild 500 kV Line #574 Ladysmith to Elmont – 26.2 miles long		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			DFAX Allocation: BGE (6.92%) / Dominion (84.48%) / PEPCO (8.60%)
b3021	Rebuild 500 kV Line #581 Ladysmith to Chancellor – 15.2 miles long		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%)
			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 (99.96%) / PEPCO (0.04%)

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Virginia Electric and Power Company (cont.)

Required Transmission 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 50 kA breaker		Dominion (100%)
b3027.4	Update the nameplate for Ladysmith 500 kV breaker "H1T575" to be 50 kA breaker		Dominion (100%)
b3027.5	Update the nameplate for Ladysmith 500 kV breaker "568T574" (will be renumbered as "H2T568") to be 50 kA 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%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual 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 Transmission Enhancements		Annual 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%)
b3110.3	Replace the Clifton 230 kV breakers "201182" and "XT2011" with 63 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 Transmission Enhancements		Annual 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%)
b3213.1	Replace the eight (8) Chickahominy 230 kV breakers with 63 kA breakers: “SC122”, “205022”, “209122”, 210222-2”, “28722”, “H222”, “21922” and “287T2129”		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3223.1	Install a second 230 kV circuit with a minimum summer emergency rating of 1047 MVA between Lanexa and Northern Next substations. The second circuit will utilize the vacant arms on the double-circuit structures that are being installed on Line #224 (Lanexa – Northern Next) as part of the End-of-Life rebuild project (b3089)		Dominion (100%)
b3223.2	Expand the Northern Neck terminal from a 230 kV, 4-breaker ring bus to a 6-breaker ring bus		Dominion (100%)
b3223.3	Expand the Lanexa terminal from a 6-breaker ring bus to a breaker-and-a-half arrangement		Dominion (100%)
b3246.1	Convert 115 kV Line #172 Liberty – Lomar and 115 kV Line #197 Cannon Branch – Lomar to 230 kV to provide a new 230 kV source between Cannon Branch and Liberty. The majority of 115 kV Line #172 Liberty – Lomar and Line #197 Cannon Branch – Lomar is adequate for 230 kV operation. Rebuild 0.36 mile segment between the Lomar and Cannon Branch junction. Lines will have a summer rating of 1047MVA/1047MVA (SN/SE)		Dominion (100%)
b3246.2	Perform substation work for the 115 kV to 230 kV line conversion at Liberty, Wellington, Godwin, Pioneer, Sandlot and Cannon Branch		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3246.3	Extend 230 kV Line #2011 Cannon Branch – Clifton to Winters Branch by removing the existing Line #2011 termination at Cannon Branch and extending the line to Brickyard creating 230 kV Line #2011 Brickyard - Clifton. Extend a new 230 kV line between Brickyard and Winters Branch with a summer rating of 1572MVA/1572MVA (SN/SE)		Dominion (100%)
b3246.4	Perform substation work at Cannon Branch, Brickyard and Winters Branch for the 230 kV Line #2011 Cannon Branch – Clifton extension		Dominion (100%)
b3246.5	Replace the Gainesville 230 kV 40 kA breaker "216192" with a 50 kA breaker		Dominion (100%)
b3247	Replace 13 towers with galvanized steel towers on Doubs – Goose Creek 500 kV. Reconductor 3 mile section with three (3) 1351.5 ACSR 45/7. Upgrade line terminal equipment at Goose Creek substation to support the 500 kV line rebuild		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3262	Install a second 115 kV 33.67 MVAR cap bank at Harrisonburg substation along with a 115 kV breaker		Dominion (100%)
b3263	Cut existing 115 kV Line #5 between Bremo and Cunningham substations and loop in and out of Fork Union substation		Dominion (100%)
b3264	Install 40 kA breaker at Stuarts Draft 115 kV station and sectionalize the Doom to Dupont-Waynesboro 115 kV Line #117 into two 115 kV lines		Dominion (100%)
b3268	Build a switching station at the junction of 115 kV line #39 and 115 kV line #91 with a 115 kV capacitor bank. The switching station will be built with 230 kV structures but will operate at 115 kV		Dominion (100%)
b3300	Reconductor 230 kV Line #2172 from Brambleton to Evergreen Mills along with upgrading the line leads at Brambleton to achieve a summer emergency rating of 1574 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3301	Reconductor 230 kV Line #2210 from Brambleton to Evergreen Mills along with upgrading the line leads at Brambleton to achieve a summer emergency rating of 1574 MVA		Dominion (100%)
b3302	Reconductor 230 kV Line #2213 from Cabin Run to Yardley Ridge along with upgrading the line leads at Yardley to achieve a summer emergency rating of 1574 MVA		Dominion (100%)
b3303.1	Extend a new single circuit 230 kV Line #9250 from Farmwell substation to Nimbus substation		Dominion (100%)
b3303.2	Remove Beaumeade 230 kV Line #2152 line switch		Dominion (100%)
b3304	Midlothian area improvements for 300 MW load drop relief		Dominion (100%)
b3304.1	Cut 230 kV Line #2066 at Trabue junction		Dominion (100%)
b3304.2	Reconductor idle 230 kV Line #242 (radial from Midlothian to Trabue junction) to allow a minimum summer rating of 1047 MVA and connect to the section of 230 kV Line #2066 between Trabue junction and Winterpock, re-number 230 kV Line #242 structures to Line #2066		Dominion (100%)
b3304.3	Use the section of idle 115 kV Line #153, between Midlothian and Trabue junction to connect to the section of (former) 230 kV Line #2066 between Trabue junction and Trabue to create new Midlothian – Trabue lines with new line numbers #2218 and #2219		Dominion (100%)
b3304.4	Create new line terminations at Midlothian for the new Midlothian – Trabue 230 kV lines		Dominion (100%)
b3321	Rebuild Cranes Corner - Stafford 230 kV line		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3684	Rebuild 12.4 miles of 115 kV line from Earleys to Kelford with a summer emergency rating of 262 MVA. Replace structures as needed to support the new conductor. Upgrade breaker switch 13668 at Earleys from 1200 A to 2000 A		Dominion (100%)
b3685	Install a 33 MVAR cap bank at Cloud 115 kV bus along with a 115 kV breaker. Add 115 kV circuit breaker for 115 kV Line #38		Dominion (100%)
b3686	Purchase land close to the bifurcation point of 115 kV Line #4 (where the line is split into two sections) and build a new 115 kV switching station called Duncan Store. The new switching station will require space for an ultimate transmission interconnection consisting of a 115 kV six-breaker ring bus (with three breakers installed initially)		Dominion (100%)
b3687	Rebuild approximately 15.1 miles line segment between Bristers and Minnieville D.P. with 2-768 ACSS and 4000 A supporting equipment from Bristers to Ox to allow for future 230 kV capability of 115 kV Line #183. The continuous summer normal rating will be 523 MVA for line Ox – Minnieville. The continuous summer normal rating will be 786 MVA for Minnieville – Bristers line		Dominion (100%)
b3689.1	Reconductor approximately 24.42 miles of 230 kV Line #2114 Remington CT– Elk Run – Gainesville to achieve a summer rating of 1574 MVA by fully reconductoring the line and upgrading the wave trap and substation conductor at Remington CT and Gainesville 230 kV stations		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3689.2	Replace 230 kV breakers SC102, H302, H402 and 218302 at Brambleton substation with 4000A 80 kA breakers and associated equipment including breaker leads as necessary to address breaker duty issues identified in short circuit analysis		Dominion (100%)
b3690	Reconductor approximately 1.07 miles of 230 kV Line #2008 segment from Cub Run to Walney to achieve a summer rating of 1574 MVA. Replace line switch 200826 with a 4000A switch		Dominion (100%)
b3691	Reconductor approximately 1.4 miles of 230 kV Line #2141 from Lakeview to Carolina to achieve a summer rating of 1047 MVA		Dominion (100%)
b3692	Rebuild approximately 27.7 miles of 500 kV transmission line from Elmont to Chickahominy with current 500 kV standards construction practices to achieve a summer rating of 4330 MVA. Latest TEAC changes structures from lattice structures to H-frame		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3692.2	Switch to 5/2 H-frame structures and install approximately 27.7 miles of 230 kV transmission line (but not be terminated) from Elmont to Chickahominy. String up approximately 8 miles of new 230 kV conductor on the open arms of the structures of 230 kV Line No. 2075 that runs parallel to 500 kV Line No. 557		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3693	Expand substation and install approximately 294 MVAR cap bank at 500 kV Lexington substation along with a 500 kV breaker. Adjust the tap positions associated with the two 230/69 kV transformers at Harrisonburg to neutral position and lock them		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3694.1	Convert 115 kV Line #29 Aquia Harbour to Possum Point to 230 kV (Extended Line #2104) and swap Line #2104 and converted Line #29 at Aquia Harbour backbone termination. Upgrade terminal equipment at Possum Point to terminate converted Line #29 (now extended line #2104). (Line #29 from Fredericksburg to Aquia Harbour is being rebuilt under baseline b2981 to 230 kV standards)		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3694.2	Upgrade Aquia Harbour terminal equipment to not limit 230 kV Line #9281 conductor rating		Dominion (100%)
b3694.3	Upgrade Fredericksburg terminal equipment by rearranging 230 kV bus configuration to terminate converted Line #29 (now becoming 9281). The project will add a new breaker at the 230 kV bay and reconfigure line termination of 230 kV Line #2157, #2090 and #2083		Dominion (100%)
b3694.4	Reconductor/rebuild approximately 7.6 miles of 230 kV Line #2104 Cranes Corner – Stafford to achieve a summer rating of 1047 MVA. Reconductor/rebuild approximately 0.34 miles of 230 kV Line #2104 Stafford – Aquia Harbour to achieve a summer rating of 1047 MVA. Upgrade terminal equipment at Cranes Corner to not limit the new conductor rating		Dominion (100%)
b3694.5	Upgrade wave trap and line leads at 230 kV Line #2090 Ladysmith CT terminal to achieve 4000A rating		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3694.6	Upgrade Fuller Road substation to feed Quantico substation via 115 kV radial line. Install four-breaker ring bus and break 230 kV Line #252 into two new lines: 1) Line #252 between Aquia Harbour and Fuller Road and 2) Line #9282 between Fuller Road and Possum Point. Install a 230/115 kV transformer which will serve Quantico substation		Dominion (100%)
b3694.7	Energize in-service spare 500/230 kV Carson Transformer #1		Dominion (100%)
b3694.8	Partial wreck and rebuild 10.34 miles of 230 kV Line #249 Carson – Locks to achieve a minimum summer emergency rating of 1047 MVA. Upgrade terminal equipment at Carson and Locks stations to not limit the new conductor rating		Dominion (100%)
b3694.9	Wreck and rebuild 5.4 miles of 115 kV Line #100 Locks – Harrowgate to achieve a minimum summer emergency rating of 393 MVA. Upgrade terminal equipment at Locks and Harrowgate stations to not limit the new conductor rating and perform Line #100 Chesterfield terminal relay work		Dominion (100%)
b3694.10	Reconductor approximately 2.9 miles of 230 kV Line #211 Chesterfield – Hopewell to achieve a minimum summer emergency rating of 1046 MVA		Dominion (100%)
b3694.11	Reconductor approximately 2.9 miles of 230 kV Line #228 Chesterfield – Hopewell to achieve a minimum summer emergency rating of 1046 MVA		Dominion (100%)
b3694.12	Upgrade equipment at Chesterfield 230 kV substation to not limit ratings on Line #211 and #228		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3694.13	Upgrade equipment at Hopewell 230 kV substation to not limit ratings on Line #211 and #228		Dominion (100%)
b3702	Install one 13.5 Ohm series reactor to control the power flow on the 230 kV Line #2054 from Charlottesville substation to Proffit Rd. 230 kV line		AEC (1.59%) / APS (8.85%) / ATSI (5.54%) / BGE (10.79%) / ComEd (1.86%) / Dayton (0.21%) / DEOK (1.16%) / Dominion (18.99%) / DPL (3.68%) / DL (1.16%) / ECP** (0.27%) / HTP*** (0.22%) / JCPL (4.53%) / ME (1.73%) / NEPTUNE* (0.68%) / PECO (6.95%) / PENELEC (4.75%) / PEPCO (9.69%) / PPL (9.78%) / PSEG (7.28%) / RE (0.29%)
b3707.1	Reconductor approximately 0.57 mile of 115 kV Line #1021 from Harmony Village to Greys Point with 768 ACSS to achieve a summer emergency rating of 237 MVA. The current conductor is 477 ACSR		Dominion (100%)
b3707.2	Reconductor approximately 0.97 mile of 115 kV Line #65 from Rappahannock to White Stone with 768 ACSS to achieve a summer emergency rating of 237 MVA. The current conductor is 477 ACSR		Dominion (100%)

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**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3718.1	Install one 500/230 kV 1440 MVA transformer at a new substation called Wishing Star. Cut and extend 500 kV Line #546 (Brambleton - Mosby) and 500 kV Line #590 (Brambleton - Mosby) to the proposed Wishing Star substation. Lines to terminate in a 500 kV breaker and a half configuration		Dominion (100%)
b3718.2	Install one 500/230 kV 1440 MVA transformer at a new substation called Mars near Dulles International Airport		Dominion (100%)
b3718.3	Construct a new 500 kV transmission line for approximately 3.5 miles along with substation upgrades at Wishing Star and Mars. New right-of-way will be needed and will share same structures with the line. New conductor to have a minimum summer normal rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.04%) / Dominion (90.96%)
b3718.4	Reconductor approximately 0.62 mile of 230 kV Line #2214 (Buttermilk - Roundtable) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.5	Reconductor approximately 1.52 miles of 230 kV Line #2031 (Enterprise – Greenway - Roundtable) to achieve a summer rating of 1574 MVA		Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3718.6	Reconductor approximately 0.64 mile of 230 kV Line #2186 (Enterprise - Shellhorn) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.7	Reconductor approximately 2.17 miles of 230 kV Line #2188 (Lockridge – Greenway - Shellhorn) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.8	Reconductor approximately 0.84 mile of 230 kV Line #2223 (Lockridge - Roundtable) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.9	Reconductor approximately 3.98 miles of 230 kV Line #2218 (Sojourner – Runway - Shellhorn) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.10	Reconductor approximately 1.61 miles of 230 kV Line #9349 (Sojourner - Mars) to achieve a summer rating of 1574 MVA		Dominion (100%)
b3718.11	Upgrade 4 - 500 kV breakers (total) to 63 kA on either end of 500 kV Line #502 (Loudoun - Mosby)		Dominion (100%)
b3718.12	Upgrade 4 - 500 kV breakers (total) to 63 kA on either end of 500 kV Line #584 (Loudoun - Mosby)		Dominion (100%)
b3718.13	Cut and loop 230 kV Line #2079 (Sterling Park - Dranesville) into Davis Drive substation and install two GIS 230 kV breakers		Dominion (100%)
b3718.14	Construct a new 230 kV transmission line for approximately 3.5 miles along with substation upgrades at Wishing Star and Mars. New right-of-way will be needed and will share same structures with the 500 kV line. New conductor to have a minimum summer normal rating of 1573 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3759	Reconductor approximately 10.5 miles of 115 kV Line #23 segment from Oak Ridge to AC2-079 Tap to minimum emergency ratings of 393 MVA Summer / 412 MVA Winter		Dominion (100%)
b3779	Cut existing 230 kV line #2183 and extend from Poland Road substation to Evergreen Mills substation. Approximately 0.59 miles of new line will be built from the cut-in to the Evergreen Mills substation. Cut and extend the existing 230 kV line #2183 creating a new line #2210 from Brambleton substation to be terminated at Evergreen Mills substation. Approximately 0.59 miles of new line will be built from the cut-in to the Evergreen Mills substation		Dominion (100%)
b3800.118	Line work for terminating Doubs to Bismark line into Woodside 500 kV substation (DOM Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (21.09%) / BGE (6.55%) / Dominion (64.94%) / PEPCO (7.42%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.120	Aspen substation work to terminate the new NextEra 500 kV line. Include Aspen 500 kV substation portion build		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.18%) / BGE (7.21%) / Dominion (72.52%) / PEPCO (11.09%)
b3800.200	Build a new 500 kV line from Aspen - Golden on 500/230 kV double circuit structures with substation upgrades at Aspen and Golden. New conductor to have a minimum summer normal rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.201	Install two 500/230 kV transformer at Golden substation		Dominion (100%)
b3800.202	Install one 500/230 kV transformer at Aspen substation		Dominion (86.28%) / PEPCO (13.72%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.203	Install a second 500/230 kV 1440 MVA transformer at Mars substation		Dominion (100%)
b3800.204	Reconductor 0.5 mile section of 230 kV line No. 2150 Golden - Paragon Park Circuit 1 to achieve a summer rating of 1573 MVA		Dominion (100%)
b3800.205	Reconductor 0.5 mile section of 230 kV line No. 2081 Golden - Paragon Park Circuit 2 to achieve a summer rating of 1573 MVA		Dominion (100%)
b3800.206	Upgrade Paragon Park substation line conductors to 4000A continuous current rating for 230 kV lines No. 2081 and No. 2150		Dominion (100%)
b3800.207	Reconductor 230 kV line No. 2207 Paragon Park – BECO to achieve a summer rating of 1573 MVA		Dominion (100%)
b3800.208	Upgrade Paragon Park substation conductor and line leads to 4000A continuous current rating for 230 kV line No. 2207		Dominion (100%)
b3800.209	Upgrade BECO substation equipment to 4000A continuous current rating for 230 kV line No.2207		Dominion (100%)
b3800.210	Build a new 230 kV line from Mars - Lockridge on 500/230 kV double circuit structures to achieve a summer rating of 1573 MVA. Install 230 kV equipment at Mars and Lockridge. Remove 230 kV line No. 2095 Mars-Shellhorn and 230 kV line No. 2292 Mars-Sojourner in the existing transmission corridor between Sojourner and Mars substations so that they can be rerouted to the south side of Mars substation, adding approximately 2 miles of new conductor. This is to allow for termination of the line No.2413 and 5003 Golden-Mars 230 and 500 kV circuits into Mars substation. Cut 230 kV line No. 2095 Mars-Shellhorn into Sojourner substation, creating 230 kV line No. 2427 (Mars-Sojourner) and 230 kV line No. 2095 (Sojourner-Shellhorn). Upgrade 4 230 kV breakers at Sojourner substation from 63 kA to 80 kA		Dominion (100%)
b3800.211	Build a new 230 kV line from Lockridge - Golden on 500/230 kV double circuit structures to achieve a summer rating of 1573 MVA. Install 230 kV equipment at Golden and Lockridge substations		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.212	Build a new 500 kV line from Mars - Golden on 500/230 kV double circuit structures with substation upgrades at Golden and Mars. New conductor to have a minimum summer normal rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (99.96%) / Dominion (0.04%)
b3800.213	Cut 500 kV line No. 558 Brambleton - Goose Creek into Aspen substation. Upgrade 500 kV terminal equipment at Aspen and Goose Creek to 5000A continuous rating current. At Goose Creek, replace circuit breakers 59582 and 55882, and associated disconnect switches, breaker leads, bus, and line risers to accommodate 5000A rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (99.39%) / Dominion (0.61%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.214	Build a new 500 kV line from Aspen - Goose Creek to achieve a summer rating of 4357 MVA. Install new 500 kV terminal equipment at Aspen		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (99.39%) / Dominion (0.61%)
b3800.215	Cut 230 kV line No. 2150 Sterling Park - Paragon Park Circuit 1 into Golden substation and install 230 kV equipment at Golden. Upgrade relay settings at Golden substation for upgrading 230 kV line No. 2150 to 4000A continuous current rating		Dominion (100%)
b3800.216	Cut 230 kV line No. 2081 Sterling Park - Paragon Park Circuit 2 into Golden substation and install 230 kV equipment at Golden. Upgrade relay settings at Golden substation for upgrading 230 kV line No. 2081 to 4000A continuous current rating		Dominion (100%)
b3800.217	Build a new 230 kV line from Aspen - Sycolin Creek on 500/230 kV double circuit structures to achieve a summer rating of 1573 MVA. Install 230 kV equipment at Golden and Sycolin Creek substations		Dominion (86.28%) / PEPCO (13.72%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.218	Build a new 230 kV line from Sycolin Creek - Golden on 500/230 kV double circuit structures to achieve a summer rating of 1573 MVA. Install 230 kV equipment at Golden and Sycolin Creek substations		Dominion (100%)
b3800.219	Replace seven overdutied 230 kV breakers at Beaumeade substation with 80 kA breakers		Dominion (100%)
b3800.220	Replace four overdutied 230 kV breakers at BECO substation with 80 kA breakers		Dominion (100%)
b3800.221	Replace four overdutied 230 kV breakers at Belmont substation with 80 kA breakers		Dominion (100%)
b3800.222	Replace one overdutied 230 kV breaker at Discovery substation with 80 kA breaker		Dominion (100%)
b3800.223	Replace one overdutied 230 kV breaker at Pleasant View substation with 80 kA breaker		Dominion (100%)
b3800.224	Replace two overdutied 230 kV breakers at Shellhorn substation with 80 kA breakers		Dominion (100%)
b3800.225	Change 500 kV line No. 558 destination at Brambleton to Aspen substation and upgrade line protection relays		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (5.20%) / DL (0.46%) / Dominion (91.40%) / ME (0.59%) / PEPCO (2.35%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.226	Change 230 kV lines No. 2081 and No. 2150 at Paragon Park substation destination to Golden substation and upgrade line protection relays		Dominion (100%)
b3800.227	Change 230 kV lines No. 2081 and No. 2150 at Sterling Park substation destination to Golden substation and upgrade line protection relays		Dominion (100%)
b3800.228	Reconductor 1.47 miles of 230 kV lines No. 2081 and No. 2150 from Sterling Park to Golden substation. Upgrade terminal equipment at Sterling Park to 4000A continuous current		Dominion (100%)
b3800.229	Reconductor 0.67 miles of 230 kV lines No. 2194 and No. 9231 from Davis Drive to Sterling Park substation. Terminal equipment at remote end substations will be installed or upgraded to 4000A continuous current rating to support new conductor ratings		Dominion (100%)
b3800.230	Reset relays at Breezy Knoll for the revised current rating of 230 kV line No. 2098 Pleasant View - Hamilton		Dominion (100%)
b3800.231	Reset relays at Dry Mill for the revised current rating of 230 kV line No. 2098 Pleasant View - Hamilton		Dominion (100%)
b3800.232	Reset relays at Hamilton for the revised current rating of 230 kV line No. 2098 Pleasant View - Hamilton		Dominion (100%)
b3800.233	Upgrade equipment to 4000A continuous current rating at Pleasant View substation in support of 230 kV line No. 2098 wreck and rebuild. Replace circuit breakers 274T2098 & 2098T2180 and associated disconnect switches, breaker leads, bus, and line risers to accommodate 4000A rating		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.234	Wreck and rebuild approximately one mile of 230 kV line No. 2098 between Pleasant View and structure 2098/9, where line No. 2098 turns towards Hamilton substation		Dominion (100%)
b3800.235	Replace five overdutied 230 kV breakers at Loudoun substation with 80 kA breakers		Dominion (100%)
b3800.236	Replace two overdutied 230 kV breakers at Ox substation with 63 kA breakers		Dominion (100%)
b3800.237	Replace two overdutied 230 kV breakers at Pleasant View substation with 63 kA breakers		Dominion (100%)
b3800.238	Upgrade equipment to 4000A continuous current rating at Pleasant View substation in support of 230 kV line No. 203 rebuild. Replace circuit breakers 203T274 & L3T203 and associated disconnect switches, breaker leads, bus, and line risers to accommodate 4000A rating		APS (8.09%) / BGE (8.25%) / Dominion (64.87%) / PEPCO (18.79%)
b3800.239	Wreck and rebuild 230 kV line No. 203 between Pleasant View and structure 203/15 using double circuit 500/230 kV structures. The 500 kV line is from Aspen - Doubs		APS (8.09%) / BGE (8.25%) / Dominion (64.87%) / PEPCO (18.79%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.240	Build a new 500 kV line from Aspen - Doubs using double circuit 500/230 kV structures. The 230 kV line is from Pleasant View - structure 203/15. Install terminal equipment at Aspen for a 5000A line to Doubs. This includes GIS breakers, GIS-to-AIS transition equipment, and metering CCVTs and CTs for the tie line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.09%) / Dominion (99.89%) / PEPCO (0.02%)
b3800.241	Rebuild 500 kV line No. 514 from Goose Creek - Doubs using 500/230 kV double circuit structures. The new double circuit towers will accommodate 230 kV line No. 2098 between Pleasant View substation and structure 2098/9. Upgrade equipment at Goose Creek to 5000A continuous current rating in support of line No. 514 wreck and rebuild. Replace circuit breakers 514T595 & 51482 and associated disconnect switches, breaker leads, bus, and line risers to accommodate 5000A rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (0.08%) / Dominion (99.90%) / PEPCO (0.02%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.242	Upgrading switches 20366M and 20369M and line leads to 4000A continuous current rating of 230 kV line No. 203 at Edwards Ferry substation		APS (11.45%) / BGE (14.14%) / Dominion (42.82%) / PEPCO (31.59%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.300	Wreck/Rebuild 230 kV line No. 2135 Hollymeade Junction – Cash's Corner using double-circuit capable 230 kV poles. (The second 230 kV circuit will be wired but not have terminal ends.)		Dominion (100%)
b3800.301	Wreck/Rebuild 230 kV line No. 2135 Cash's Corner - Gordonsville using double-circuit capable 230 kV poles. (The second 230 kV circuit will be wired but not have terminal ends.)		Dominion (100%)
b3800.302	Upgrade Cash's Corner switches 213576 and 213579 and line leads to 4000A continuous current rating of 230 kV line No. 2135		Dominion (100%)
b3800.303	Upgrade Gordonsville substation line leads to 4000A continuous current rating of 230 kV line No. 2135		Dominion (100%)
b3800.304	Upgrade Charlottesville substation switch 205415 and line leads to 4000A continuous current rating of 230 kV line No. 2054		Dominion (100%)
b3800.305	Install one 230 kV 300 MVAR STATCOM and associated equipment at Beaumeade 230 kV substation		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.306	Install one 500 kV, 150 MVAR Shunt Capacitor Bank and associated equipment at Morrisville substation. This addition will require a control house expansion to accommodate for two new panels		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3800.307	Install one 500 kV, 300 MVAR STATCOM and associated equipment at Mars substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.308	Install one 230 kV, 150 MVAR Shunt Capacitor Bank and associated equipment at Mars substation		Dominion (100%)
b3800.309	Install one 230 kV, 150 MVAR Shunt Capacitor Bank and associated equipment at Wishing Star substation		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.310	Install one 500 kV, 293.8 MVAR Shunt Capacitor Bank & associated equipment at Wishing Star substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3800.311	Rebuild 500 kV line No. 545 Bristers - Morrisville as a single circuit monopole line to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (91.07%) / PEPCO (8.93%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.312	Rebuild 500 kV line No. 569 Loudoun - Morrisville to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (11.72%) / Dominion (88.28%)
b3800.313	Rebuild approximately 10.29 miles 500 kV line segment of line No. 535 (Meadow Brook to Loudoun) to accommodate the new 500 kV line in the existing ROW		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.93%) / BGE (6.86%) / Dominion (70.92%) / PEPCO (8.29%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.314	Rebuild approximately 4.83 miles of 500 kV line No. 546 Mosby - Wishing Star to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 4357 MVA. Upgrade and install equipment at Mosby substation to upgrade terminal equipment to be rated for 5000A for 500 kV line No. 546		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** APS (41.98%) / Dominion (34.03%) / PEPCO (23.99%)
b3800.315	Rebuild approximately 4.59 miles of 500 kV line No. 590 Mosby - Wishing Star to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 4357 MVA. Upgrade and install equipment at Mosby substation to upgrade terminal equipment to be rated for 5000A for 500 kV line No. 590		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** APS (41.98%) / Dominion (34.03%) / PEPCO (23.99%)
b3800.316	Rebuild approximately 6.17 miles of 230 kV line No. 2030 Gainesville - Mint Springs to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.317	Rebuild approximately 1.58 miles of 230 kV line No. 2030 Mint Springs - Loudoun to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.318	Rebuild approximately 4.2 miles of 230 kV line No. 2045 Loudoun - North Star to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.319	Rebuild approximately 0.88 miles of 230 kV line No. 2045 North Star - Brambleton to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.320	Rebuild approximately 1.22 miles of 230 kV line No. 2227 Brambleton - Racefield to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.321	Rebuild approximately 3.69 miles of 230 kV line No. 2094 Racefield - Loudoun to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.322	Rebuild approximately 9.16 miles of 230 kV line No. 2101 Bristers - Nokesville to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.323	Rebuild approximately 2.89 miles of 230 kV line No. 2101 Nokesville - Vint Hill TP to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.324	Rebuild approximately 0.33 miles of 230 kV line No. 2101 Vint Hill TP - Vint Hill to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.325	Rebuild approximately 3.32 miles of 230 kV line No. 2114 Rollins Ford - Vint Hill to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.326	Rebuild approximately 10.09 miles of 230 kV line No. 2114 Vint Hill - Elk Run to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.327	Rebuild approximately 4.43 miles of 230 kV line No. 2140 Heathcote - Catharpin to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.328	Rebuild approximately 2.88 miles of 230 kV line No. 2140 Catharpin - Loudoun to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.329	Rebuild approximately 0.25 miles of 230 kV line No. 2151 Railroad DP - Gainesville to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.330	Rebuild approximately 4.14 miles of 230 kV line No. 2163 Vint Hill - Liberty to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.331	Rebuild approximately 0.48 miles of 230 kV line No. 2176 Heathcote - Gainesville to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.332	Rebuild approximately 1.11 miles of 230 kV line No. 2222 Rollins Ford - Gainesville to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.333	Rebuild approximately 1.65 miles of 115 kV line No. 183 Bristers - Ox to accommodate the new 500 kV line in the existing ROW. New conductor to have a summer rating of 1573 MVA		Dominion (100%)
b3800.334	Replace four overdutied 230 kV breakers at Loudoun Substation with 80 kA breakers		Dominion (100%)
b3800.335	Replace one overdutied 500 kV breaker at Ox Substation with a 63 kA breaker		Dominion (100%)
b3800.336	Upgrade and install equipment at Bristers substation to support the new conductor 5000A rating for 500 kV line No. 545		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (91.07%) / PEPCO (8.93%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.337	Upgrade and install equipment at Brambleton substation to support the new conductor termination. All terminal equipment for 230 kV lines No. 2045 and No. 2094 to be rated for 4000A continuous current rating		Dominion (100%)
b3800.338	Revise relay settings at Dawkins Branch 230 kV station		Dominion (100%)
b3800.339	Upgrade and install equipment at Gainesville 230 kV substation to support the new conductor termination. All terminal equipment for 230 kV line No. 2030 to be rated for 4000A continuous current rating		Dominion (100%)
b3800.340	Revise relay settings at Heathcote 230 kV station		Dominion (100%)
b3800.341	Upgrade and install equipment at Loudoun substation for 230 kV line No. 2094 Loudoun - Racefield to be rated for 4000A continuous current rating		Dominion (100%)
b3800.342	Upgrade and install equipment at Loudoun substation for 230 kV line No. 2045 Loudoun - North Star to be rated for 4000A continuous current rating		Dominion (100%)
b3800.343	Upgrade and install equipment at Loudoun substation for 230 kV line No. 2030 Loudoun - Mint Springs to be rated for 4000A continuous current rating		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.344	Upgrade and install equipment at Loudoun substation to support the new conductor 5000A rating for 500 kV line No. 569 Loudoun - Morrisville		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (11.72%) / Dominion (88.28%)
b3800.345	Revise relay settings at 230 kV Mint Springs station		Dominion (100%)
b3800.346	Upgrade and install equipment at Morrisville substation to support the new 500 kV conductor termination. All terminal equipment to be rated for 5000A for 500 kV line No. 545 and No. 569. Upgrade 500 kV bus 2 to 5000A		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (11.72%) / Dominion (88.28%)
b3800.347	Revise relay settings at North Star 230 kV station		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.348	Revise relay settings at Racefield 230 kV station		Dominion (100%)
b3800.349	Revise relay settings at Railroad 230 kV station		Dominion (100%)
b3800.350	Install terminal equipment at Vint Hill 500 kV substation to support a 5000A line to 500 kV Morrisville substation. Update relay settings for 230 kV lines No. 2101, No. 2163, and 500 kV line No. 535		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.79%) / Dominion (90.21%)
b3800.351	Update relay settings at Vint Hill for 230 kV line No. 2101 Vint Hill - Bristers		Dominion (100%)
b3800.352	Update relay settings at Vint Hill for 230 kV line No. 2163 Vint Hill - Liberty		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.353	Update relay settings at Vint Hill for 500 kV line No. 535 Vint Hill - Loudoun		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (13.93%) / BGE (6.86%) / Dominion (70.92%) / PEPCO (8.29%)
b3800.354	Install terminal equipment at Wishing Star 500 kV substation to support a 5000A line to Vint Hill. Update relay settings for 500 kV lines No. 546 and No. 590		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (21.45%) / Dominion (78.55%)
b3800.355	Revise relay settings at Youngs Branch 230 kV station		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.356	Build a new 500 kV line from Vint Hill to Wishing Star. The line will be supported on single circuit monopoles. New conductor to have a summer rating of 4357 MVA. Line length is approximately 16.59 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (21.45%) / Dominion (78.55%)
b3800.357	Build a new 500 kV line from Morrisville to Vint Hill. New conductor to have a summer rating of 4357 MVA. Line length is approximately 19.71 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.79%) / Dominion (90.21%)
b3800.358	Replace single unit Locks 230/115 kV 168 MVA transformer TX No.7 with new single unit transformer with a rating of 224 MVA. Lead lines at the 115 kV level will be upgraded to 2000A		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.359	Wreck and rebuild 230 kV line No. 2090 Ladysmith CT - Summit D.P. segment as a double circuit 230 kV line to achieve a summer rating of 1573 MVA. Only one circuit will be wired at this stage. Upgrade circuit breaker leads, switches and line leads at Ladysmith CT to 4000A		Dominion (100%)
b3800.360	Wreck/Rebuild 230 kV line No. 2054 segment Charlottesville – Hollymeade Junction using double-circuit capable 230 kV poles. (The second 230 kV circuit will be wired but not have terminal ends)		Dominion (100%)
b3800.361	Rebuild 230 kV line No. 233 Charlottesville - Hydraulic Road - Barracks Road - Crozet-Dooms		Dominion (100%)
b3800.362	Rebuild 230 kV line No. 291 segment from Charlottesville - Barracks Road		Dominion (100%)
b3800.363	Rebuild 230 kV line No. 291 segment from Barracks Road - Crozet		Dominion (100%)
b3800.364	Rebuild 230 kV line No. 291 segment Crozet - Dooms		Dominion (100%)
b3800.365	Hollymeade substation Relay Revision for 230 kV line No. 2054 Charlottesville - Hollymeade		Dominion (100%)
b3800.366	Upgrade the terminal equipment at 230 kV Charlottesville station to 4000A for 230 kV line No. 2054 (Charlottesville - Hollymeade)		Dominion (100%)
b3800.367	Proffit DP substation Relay revision for 230 kV line No. 2054 Charlottesville - Hollymeade		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.368	Barracks Road substation relay reset to accommodate the rebuilt line 230 kV lines No. 233 and No. 291		Dominion (100%)
b3800.369	Crozet substation relay reset to accommodate the rebuilt 230 kV lines No. 233 and No. 291		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.370	Charlottesville 230 kV substation terminal equipment upgrade for 230 kV lines No. 233 and No. 291 rebuild		Dominion (100%)
b3800.371	Upgrade Hydraulic Road substation equipment for 230 kV line No. 233 and No. 291 rebuild		Dominion (100%)
b3800.372	Dooms substation terminal equipment upgrade for 230 kV line No. 233 and No. 291 rebuild		Dominion (100%)
b3800.373	Wreck and rebuild approximately 7.14 miles of 230 kV line No. 256 from St. Johns to structure 256/108 to achieve a summer rating of 1573 MVA. Line switch 25666 at St. Johns to be upgraded to 4000A		Dominion (100%)
b3800.374	Reconductor approximately 5.30 miles of 230 kV line No. 256 from Ladysmith CT to structure 256/107 to achieve a summer rating of 1573 MVA. Terminal equipment at remote end substations will be upgraded to 4000A		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.375	Construct new Woodside – Goose Creek 500 kV line for approximately 3 miles on single circuit monopole structures within the Doubs – Goose Creek corridor. (Dominion Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** (APS 9.26%) / BGE (7.30%) / Dominion (72.31%) / PEPCO (11.13%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.401	Replace Ashburn 230 kV breaker SC432 with a breaker rated 63 kA		Dominion (100%)
b3800.402	Replace Beaumeade 230 kV breaker 227T2152 with a breaker rated 80 kA		Dominion (100%)
b3800.403	Replace BECO 230 kV breakers 215012 and H12T2150 with breakers rated 63 kA		Dominion (100%)
b3800.404	Replace Belmont 230 kV breaker 227T2180 with a breaker rated 80 kA		Dominion (100%)
b3800.405	Replace Brambleton 230 kV breakers 20102, 20602, 204502, 209402, 201T2045, 206T2094 with breakers rated 80 kA		Dominion (100%)
b3800.406	Replace Gainesville 230 kV breaker 216192 with a breaker rated 80 kA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.407	Replace Loudoun 230 kV breakers 204552, 217352 with breakers rated 80 kA		Dominion (100%)
b3800.408	Replace Ox 230 kV breakers 22042, 24342, 24842, 220T2063, 243T2097, 248T2013, H342 with breakers rated 80 kA		Dominion (100%)
b3800.409	Replace Paragon Park 230 kV breakers 208132, 215032, 2081T2206, 2150T2207 with breakers rated 80 kA		Dominion (100%)
b3800.410	Replace Reston 230 kV breaker 264T2015 with a breaker rated 63 kA		Dominion (100%)
b3800.411	Replace Stonewater 230 kV breakers 20662-1, 20662-2, 217862-1, 217862-2 with breakers rated 80 kA		Dominion (100%)
b3800.412	Replace Waxpool 230 kV breakers 214922-5, 214922-6, 216622-5, 216622-6 with breakers rated 63 kA		Dominion (100%)
b3850.1	Rebuild approximately 13.51 miles of 500 kV Line #588 from structure 588/184 inside Yadkin substation to structure 588/254 outside of Fentress substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3850.2	Line No. 588 terminal equipment at Yadkin substation will be upgraded to a rating of 5000A. Since the new 500 kV line will be using fiber, the wave trap will be removed and the line protection scheme will be updated	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3850.3	At Fentress substation, since the new 500 kV line will be using fiber, the wave trap will be removed and the line protection scheme will be updated	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3853.1	Replace over duty Ladysmith CT 230 kV circuit breakers SX1272 and SX3472 with an interrupting rating of 63 kA		Dominion (100%)
b3854.1	Replace over duty Carson 230 kV circuit breakers 200272 and 24972-3 with an interrupting rating of 63 kA		Dominion (100%)
b3921.1	Wreck and rebuild 115 kV Line 119 from structure 119/305 (Merck No. 5 substation) to 119/411A (Port Republic Substation). The existing structures shall be replaced one for one within the existing ROW using primarily custom engineered double circuit 115 kV steel structures on concrete foundations. The line will be rebuilt with 3-phase 1-768.2 ACSS/TW/HS (20/7) 250 MOT "Maumee" conductor and two (2) DNO-11410 OPGW. The rebuild includes the installation of double circuit structures but assumes the second circuit will not be installed as part of this project, and that the vacant conductor arms should not be utilized without acquiring additional ROW. This scope assumes project GITAE2029C will be completed prior to the construction of this project. Project GITAE2029C serves to install Port Republic substation, which will split Line 119 in between existing structures 119/411 and 119/412		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3921.2	Uprate the 397.5 ACSR jumpers and associated equipment to meet the line conductor rating of 393 MVA		Dominion (100%)
b3922.1	This project serves to wreck and rebuild 115 kV line 1031 from structure 1031/220 to structure 1031/329. The existing structures to be removed are primarily single circuit wood, steel or concrete monopoles. The existing structures to be removed were primarily constructed in 1993 with the weathering steel structures being constructed in 2011. The existing structures shall be replaced one for one within the existing ROW using single circuit steel monopoles on foundations. The line will be rebuilt with single circuit 3-phase 768.2 ACSS/TW/HS (20/7) “Maumee” conductor and single (1) DNO-11410 OPGW, respectively		Dominion (100%)
b3928.1	Install (1) 230 kV, 50 MVAR shunt capacitor bank and associated equipment including breaker at Navy North substation		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3929.1	Rebuild approximately 33.09 miles of 500 kV line No. 579 from structure 579/1 inside Septa substation to structure 579/193 inside Yadkin substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3929.2	At Septa substation, upgrade CB (579T586), breaker switches (56288, 57985, 58688 & 57988), and line leads to 5000A rating to support Line No. 579 rebuild		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b3929.3	At Yadkin substation, upgrade line leads to 5000A rating to support Line No. 579 rebuild		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)
b3929.4	Rebuild approximately 7.7 miles of 230 kV Line No. 2110 Suffolk – Thrasher that share the double circuit towers under Line No. 579		Dominion (100%)
b3937.1	2024W1 DVP P5 Solution #1 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP01		(Dominion (100%)
b3937.2	2024W1 DVP P5 Solution #2 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP02		Dominion (100%)
b3937.3	2024W1 DVP P5 Solution #3 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP03		Dominion (100%)
b3937.4	2024W1 DVP P5 Solution #4 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP04		Dominion (100%)
b3937.5	2024W1 DVP P5 Solution #5 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP05		Dominion (100%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3937.6	2024W1 DVP P5 Solution #6 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP06		Dominion (100%)
b3937.7	2024W1 DVP P5 Solution #7 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP07		Dominion (100%)
b3937.8	2024W1 DVP P5 Solution #8 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP08		Dominion (100%)
b3937.9	2024W1 DVP P5 Solution #9 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP09		Dominion (100%)
b3937.10	2024W1 DVP P5 Solution #10 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP10		Dominion (100%)
b3937.11	2024W1 DVP P5 Solution #11 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP11		Dominion (100%)
b3937.12	2024W1 DVP P5 Solution #12 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP12		Dominion (100%)
b3937.13	2024W1 DVP P5 Solution #13 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP13		Dominion (100%)
b3937.14	2024W1 DVP P5 Solution #14 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP14		Dominion (100%)
b3937.15	2024W1 DVP P5 Solution #15 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP15		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3937.16	2024W1 DVP P5 Solution #16 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP16		Dominion (100%)
b3937.17	2024W1 DVP P5 Solution #17 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP17		Dominion (100%)
b3937.18	2024W1 DVP P5 Solution #18 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP18		Dominion (100%)
b3937.19	2024W1 DVP P5 Solution #19 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP19		Dominion (100%)
b3937.20	2024W1 DVP P5 Solution #20 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP20		Dominion (100%)
b3937.21	2024W1 DVP P5 Solution #21 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP21		Dominion (100%)
b3937.22	2024W1 DVP P5 Solution #22 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP23		Dominion (100%)
b3937.23	2024W1 DVP P5 Solution #23 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP24		Dominion (100%)
b3937.24	2024W1 DVP P5 Solution #24 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP26		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3937.25	2024W1 DVP P5 Solution #25 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP27		Dominion (100%)
b3937.26	2024W1 DVP P5 Solution #26 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP28		Dominion (100%)
b3937.27	2024W1 DVP P5 Solution #27 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP29		Dominion (100%)
b3937.28	2024W1 DVP P5 Solution #28 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP30		Dominion (100%)
b3937.29	2024W1 DVP P5 Solution #29 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP31		Dominion (100%)
b3937.30	2024W1 DVP P5 Solution #30 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP32		Dominion (100%)
b3937.31	2024W1 DVP P5 Solution #31 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP33		Dominion (100%)
b3937.32	2024W1 DVP P5 Solution #32 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP34		Dominion (100%)
b3937.33	2024W1 DVP P5 Solution #33 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP35		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3937.34	2024W1 DVP P5 Solution #34 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP36		Dominion (100%)
b3937.35	2024W1 DVP P5 Solution #35 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP37		Dominion (100%)
b3937.36	2024W1 DVP P5 Solution #36 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP38		Dominion (100%)
b3937.37	2024W1 DVP P5 Solution #37 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP39		Dominion (100%)
b3937.38	2024W1 DVP P5 Solution #38 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP40		Dominion (100%)
b3937.39	2024W1 DVP P5 Solution #39 - DC Supply Monitoring: Addressing the following flowgate: 2024-P5-DVP41		Dominion (100%)
b3938.1	2024W1 DVP P5 Solution No. 40 – Replace and upgrade relay and associated equipment at DVP substation, addressing FG No. 2024-P5-DVP16		Dominion (100%)
b3938.2	2024W1 DVP P5 Solution No. 41 – Replace and upgrade relay and associated equipment at DVP substation, addressing FG No. 2024-P5-DVP23		Dominion (100%)
b3938.3	2024W1 DVP P5 Solution No. 42 – Replace and upgrade relay and associated equipment at DVP substation, addressing FG No. 2024-P5-DVP14		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3938.6	2024W1 DVP P5 Solution No. 45 – Replace and upgrade relay and associated equipment at DVP substation, addressing FG No. 2024-P5-DVP03		Dominion (100%)
b4000.100	At Ashburn substation 230 kV replace 50 kA breaker SC332 with 63 kA		Dominion (100%)
b4000.101	At Beaumeade substation 230 kV replace 63 kA breaker 274T2206 with 80 kA		Dominion (100%)
b4000.102	At Braddock substation 230 kV replace 40 kA breakers 207T294, 237T294, 237T297, 281T297 with 63 kA		Dominion (100%)
b4000.103	At Brambleton substation 230 kV replace 63 kA breakers 217202, 2172T2183, L102, and L202 with 80 kA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.104	At Bristers substation 230 kV replace 40 kA and 50 kA breakers H1TH2, H2TH3 and L1T2101 with 63 kA		Dominion (100%)
b4000.105	At Bull Run substation 230 kV replace 50 kA breaker H362 with 63 kA		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.106	At Buttermilk substation 230 kV replace 63 kA breakers 215212, 217012, 220312, 221412, and 2152T2203 with 80 kA		Dominion (100%)
b4000.107	At Cabin Run substation 230 kV replace 63 kA breakers 209512, 221312, and T122 with 80 kA		Dominion (100%)
b4000.108	At Carson substation 230 kV replace 40 kA breaker 23872 with 63 kA		Dominion (100%)
b4000.109	At Clifton substation 230 kV replace 63 kA breakers 201182, SR182, and XT2011 with 80 kA		Dominion (100%)
b4000.111	At Evergreen Mills substation 230 kV, replace 63 kA breakers H132, H232 with 80 kA		Dominion (100%)
b4000.112	At Goose Creek substation 230 kV, replace 63 kA breaker L1T227 with 80 kA		Dominion (100%)
b4000.113	At Goose Creek substation 500 kV, replace 50 kA breaker SC182 with 63 kA		Dominion (100%)
b4000.114	At Ladysmith S1 substation 230 kV, replace 40 kA breakers 25672, 209072, 256T2090, GT172, GT272, GT372, GT472, GT572 with 63 kA		Dominion (100%)
b4000.115	At Ladysmith substation 500 kV, replace 40 kA breaker 574T581 with 63 kA		Dominion (100%)
b4000.116	At Liberty substation 230 kV, replace 50 kA breaker SC112 with 63 kA		Dominion (100%)
b4000.117	At Lockridge substation 230 kV, replace 63 kA breakers 218872, H12T2188, 222372, and H12T2223 with 80 kA		Dominion (100%)
b4000.118	At Loudoun substation 230 kV, replace 63 kA breakers 209452, L152, and L252 with 80 kA		Dominion (100%)
b4000.119	At Loudoun Cap substation 230 kV, replace 50 kA breaker SC352 with 63 kA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.120	At Loudoun substation 500 kV, replace 50 kA breakers 502T535, 569T584, H1T569, H2T502, H2T584, and SC152 with 63 kA		Dominion (100%)
b4000.121	At Marsh Run substation 230 kV, replace 50 kA breaker 28002, 29902, 280T2039, 299T2040, 203902, and 204002 with 63 kA		Dominion (100%)
b4000.122	At Morrisville substation 230 kV, replace 50 kA breaker L1T2039, L1T2040, L2T2039, and L2T2040 with 63 kA		Dominion (100%)
b4000.123	At Morrisville substation 500 kV, replace 50 kA breakers H1T541, H1T594, H2T545, H2T569, and SC122 with 63 kA		Dominion (100%)
b4000.124	At Mosby substation 500 kV, replace 50 kA breakers 50272, 54672, 55972, 58472, 59072, 502T546, 559T584, SC172, SV172, SV272, and XT590 with 63 kA		Dominion (100%)
b4000.125	At Mt Storm substation 500 kV, replace 40 kA breaker G3T572X with 63 kA		Dominion (100%)
b4000.126	At Nimbus substation 230 kV, replace 63 kA breakers 215282, 225532-5, 225532-6, 226034 with 80 kA		Dominion (100%)
b4000.127	At NIVO 1 substation 230 kV, replace 63 kA breaker 2116T2130 with 80 kA (4-breaker ring bus)		Dominion (100%)
b4000.128	At North Anna substation 500 kV, replace 40 kA breakers 57502, G102-1, G102-2, G202, G2T575, and XT573 with 63 kA		Dominion (100%)
b4000.129	At Ox substation 230 kV, replace 50 kA and 63 kA breakers 201342, 209742, 206342, and SC242 with 80 kA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.130	At Ox substation 500 kV, replace 40 kA breakers 56142, H1T539, and H2T539 with 63 kA		Dominion (100%)
b4000.131	At Paragon Park substation 230 kV, replace 63 kA breakers 220632 and 220732 with 80 kA		Dominion (100%)
b4000.132	At Pleasantview substation 230 kV, replace 63 kA breakers 203T274 and 274T2098 with 80 kA		Dominion (100%)
b4000.133	At Pleasantview substation 500 kV, replace 40 kA breaker H322 with 63 kA		Dominion (100%)
b4000.134	At Remington substation 230 kV, replace 40 kA and 50 kA breakers 211462, GT162, GT262, GT362, GT462, 2077T2086, 208662, H962, and H9T299 with 63 kA		Dominion (100%)
b4000.135	At Roundtable substation 230 kV, replace 63 kA breakers 203102, 214902, 221402, 222302, 2031T2223, and 2149T2214 with 80 kA		Dominion (100%)
b4000.136	At Vint Hill substation 230 kV, replace 63 kA breakers 2101T2174, 2163T2174, and 2101T2163 with 80 kA		Dominion (100%)
b4000.137	At Yardley substation 230 kV, replace 63 kA breakers WT2209, WT2213, XT2209, and XT2213 with 80 kA		Dominion (100%)
b4000.300	Rebuild approximately 1.71 miles of 230 kV Line 299 from the Marsh Run substation to the Remington CT substation. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.301	Reconductor approximately 1.24 miles of 230 kV Line 280 from Remington – Marsh Run CT substation. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.302	Uprate Line No. 299 terminal equipment, line leads, and bus at Marsh Run substation to be rated to 4000A		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.303	Uprate Line No. 299 terminal equipment, line leads, and bus at Remington CT substation to be rated to 4000A		Dominion (100%)
b4000.304	Partial reconductor/partial wreck & rebuild of 230 kV Line No. 2161 Gainesville – Wheeler. New conductor has a summer rating of 1573 MVA (Wheeler – Linton Tap segment)		Dominion (100%)
b4000.305	Partial reconductor/partial wreck & rebuild of 230 kV Line No. 2161 Gainesville – Wheeler. New conductor has a summer rating of 1573 MVA (Linton Tap – Atlantic segment)		Dominion (100%)
b4000.306	Partial reconductor/partial wreck & rebuild of 230 kV Line No. 2161 Gainesville – Wheeler. New conductor has a summer rating of 1573 MVA (Atlantic – Trident segment)		Dominion (100%)
b4000.307	Partial reconductor/partial wreck & rebuild of 230 kV Line No. 2161 Gainesville – Wheeler. New conductor has a summer rating of 1573 MVA (Trident – Gainesville segment)		Dominion (100%)
b4000.308	Upgrade all Line No. 2161 terminal equipment at Gainesville to 4000A. A CCVT will also be replaced due to aging		Dominion (100%)
b4000.309	Upgrade all Line No. 2161 terminal equipment Wheeler substation to 4000A		Dominion (100%)
b4000.310	Revise relay settings at Trident substation		Dominion (100%)
b4000.311	Rebuild 230 kV Line No. 213 and No. 225 from Thelma – Lakeview. New conductor has a summer rating of 1573 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.312	At Thelma substation, upgrade line lead, wave traps (213WT & 225WT), circuit breaker leads to 4000A. CB switches 22535, 23235, 23238 and 21335 will also be upgrade to 4000A DEB switches. CCVTs 213P1, 213P2 and 213P3 will be replaced due to aging		Dominion (100%)
b4000.313	At Lakeview substation, upgrade wave traps 213WT and 225WT, line leads, and circuit breaker leads to 4000A. Upgrade CB switches 22565 and 22564 to 4000A double-end break switches. Replace CCVTs 225P1, 225P2, and 225P3 due to aging		Dominion (100%)
b4000.314	Reconductor 230 kV Line No. 2003 Chesterfield – Tyler segment. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.315	Reconductor 230 kV Line No. 2003 Tyler – Poe segment. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.316	At Poe substation, uprate all Line No. 2003 terminal equipment, line leads, and bus to be rated to 4000A		Dominion (100%)
b4000.317	At Tyler substation, upgrade the necessary line terminal equipment to maintain 4000A at Tyler substation		Dominion (100%)
b4000.318	Revise relay settings at Chesterfield substation		Dominion (100%)
b4000.319	Reconductor 230 kV Line No. 2002 Carson – Poe. New conductor has a summer rating of 1573 MVA		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.320	At Carson substation, upgrade all Line No. 2002 terminal equipment at Carson to 4000A. CCVTs will also be replaced due to aging		Dominion (100%)
b4000.321	At Poe substation, upgrade all Line No. 2002 terminal equipment at Carson to 4000A. CCVTs will also be replaced due to aging		Dominion (100%)
b4000.322	Build a new 230 kV Line from Nokesville – Hornbaker using the vacant arms of the double circuit monopole structures installed as part of previous project 993027. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.323	Upgrade terminal equipment at Nokesville substation. The project adds one more line to Nokesville, including the installation of one 230 kV breaker and two 230 kV switches		Dominion (100%)
b4000.324	Upgrade terminal equipment at Hornbaker substation. This project is for installing a new 230 kV 4000A rated line terminal at Hornbaker to accommodate the new line to Nokesville		Dominion (100%)
b4000.325	Build a new 26.38 miles 230 kV line from Elmont to Ladysmith on the existing 5-2 structures between the two stations. New conductor has a summer rating of 1573 MVA		Dominion (100%)
b4000.326	At Elmont substation, install/upgrade associated equipment to accommodate a 4000A line rating for the new 230 kV line between Elmont and Ladysmith		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.327	Upgrade/install equipment at Ladysmith substation to 4000A. Expansion will be required to accommodate a total of three (3) new 230 kV strings of breaker and a half scheme		Dominion (100%)
b4000.328	Construct a new 24.5 miles 230 kV Line 9482 from Cloverhill substation to Ox substation		Dominion (100%)
b4000.329	At Ox substation, install the necessary associated equipment to accommodate the new Line No. 9482 between Cloverhill and Ox. This project also includes expanding the substation with associated security level 1 fencing and super post structure needed		Dominion (100%)
b4000.330	At Cloverhill substation, install the necessary associated equipment to accommodate the new line between Cloverhill and Ox. This project also includes demolishing and reconstructing the existing bus system and roadway		Dominion (100%)
b4000.331	Construct a new 230 kV single circuit line from Raines substation to Cloud substation to solve electrical violations cause by the significant load growth in South Hill, Virginia. The scope also includes an idle 230 kV circuit being installed between these stations		Dominion (100%)
b4000.332	At Cloud substation, upgrade substation terminal equipment to 4000A		Dominion (100%)
b4000.333	At Raines substation, upgrade substation terminal equipment to 4000A		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.334	Reconductor 115 kV Line No. 121 from Poe to Prince George. Specifically, Line No. 121 will be reconductored and converted to 230 kV from Poe substation to Prince George substation		Dominion (100%)
b4000.335	At Poe substation, install a new 230 kV six breaker ultimate ring bus which will fit the station to current 230 kV standards. The substation scope includes the installation of 230 kV breaker and half GIS bus. Work at Poe substation is associated with Line No. 121 reconductor		Dominion (100%)
b4000.336	Build a new 230/115 kV Prince George substation along the existing 115 or 230 kV corridor. The substation scope includes the installation of 230 kV breakers & 1-115 kV breaker along with its associated terminal equipment initially but will have provision for making it a 6-breaker ring (both 230 and 115 kV) in future. The existing 230-115 kV transformer at Prince George will be relocated to serve this new substation		Dominion (100%)
b4000.337	Extend a new 230 kV line approximately 7.85 miles between the existing Morrisville and Anderson Branch substations. The existing tower structures currently supporting the Bristers to Morrisville 500 kV Line No. 545 will be used to support this new line as shared tower structures		Dominion (100%)
b4000.338	At Morrisville substation, install/upgrade substation terminal equipment to 4000A		Dominion (100%)

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.339	At Anderson Branch substation, install/upgrade substation terminal equipment to 4000A		Dominion (100%)
b4000.340	Uprate existing Goose Creek 500/230 kV transformer to 1440 MVA		Dominion (100%)
b4000.341	Remove the 500 kV conductor previously planned to terminate into the Vint Hill 500 kV substation and extend approximately 0.2 miles of conductor to fly-over the site		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** Dominion (100.00%)
b4000.342	Remove the terminal equipment and substation work required for the termination of the Morrisville – Wishing Star 500 kV line into Vint Hill		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** Dominion (100.00%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.343	Uprate bus at Brambleton to support 500 kV Line No. 558 (Aspen – Brambleton) uprate		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100.00%)
b4000.344	Build a 500 kV line from North Anna substation (bypassing Ladysmith Substation) to a new substation called Kraken. New conductor to have a minimum summer normal rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (91.69%)/ PEPCO (8.31%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.345	Build a 500 kV line from a new substation called Kraken to a new substation called Yeat. New conductor to have a minimum summer normal rating of 4357 MVA		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100.00%)
b4000.347	Upgrade/install equipment at North Anna substation to 5000A to support the new conductor rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (91.69%) / PEPCO (8.31%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.349	Update relay settings at Ladysmith to change the destination of 500 kV Line No. 568 from Possum Point to Kraken		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (13.28%) / Dominion (64.48%) / PEPCO (22.24%)
b4000.350	Update relay settings at Possum Point to change the destination of 500 kV Line No. 568 from Ladysmith to Kraken		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (8.30%) / Dominion (78.64%) / PEPCO (13.06%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4000.351	Cut in Line No. 568 Ladysmith – Possum Point into Kraken, creating Line No. 9517 Ladysmith to Kraken	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (8.30%) / Dominion (78.64%) / PEPCO (13.06%)
b4000.352	Cut in line Ladysmith – Possum Point into Kraken, creating new Line No. 568 Kraken to Possum Point	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** BGE (13.28%) / Dominion (64.48%) / PEPCO (22.24%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.353	Upgrade 500 kV terminal equipment at Elmont substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.79%) / BGE (6.14%) / Dominion (75.61%) / PEPCO (8.46%)
b4000.354	Expand Ladysmith substation to add redundant circuit breakers to the middle breakers on both 500 kV strings (574T575 and 568T581). The equipment including switches 57518, 57515, and H115 will be replaced with 5000A equipment		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.79%) / BGE (6.14%) / Dominion (75.61%) / PEPCO (8.46%)
b4000.360	Replace two switches, a wave trap and leads to upgrade all related substation equipment to 2000A at Altavista 138 kV substation		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.1	Chesterfield - Basin 230 kV rebuild: Wreck and rebuild approximately 12.5 miles of Chesterfield - Basin 230 kV line		AEC (0.39%) / AEP (0.58%) / APS (0.94%) / ATSI (3.48%) / BGE (2.10%) / ComEd (0.44%) / DL (1.05%) / Dominion (83.53%) / DPL (0.71%)/ JCPL (0.75%) / ME (0.28%) / NEPTUNE* (0.08%)/ PECO (1.41%)/ PEPCO (2.43%) / PPL (0.53%) / PSEG (1.25%) / RE (0.05%)
b4030.2	Chesterfield - Hopewell 230 kV reconductor: Reconductor 230 kV lines No. 211 and No. 228 between the existing Chesterfield-Hopewell 230 kV substation. Each line reconductor is approximately 3 miles long		AEC (1.11%) / AEP (1.79%) / APS (2.66%) / ATSI (9.97%) / BGE (6.01%) / ComEd (1.23%) / Dayton (0.08%) / DEOK (1.15%) / DL (3.04%) / Dominion (50.96%) / DPL (2.00%) / EKPC (0.27%) / JCPL (2.11%) / ME (0.80%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.98%) / PENELEC (0.45%) / PEPCO (7.00%) / PPL (1.49%) / PSEG (3.52%) / RE (0.13%)
b4030.3	Basin 230 kV substation scope: Replace all terminal equipment, line leads, and bus at Basin 230 kV substation to be rated to 4000A		AEC (0.39%) / AEP (0.58%) / APS (0.94%) / ATSI (3.48%) / BGE (2.10%) / ComEd (0.44%) / DL (1.05%) / Dominion (83.53%) / DPL (0.71%)/ JCPL (0.75%) / ME (0.28%) / NEPTUNE* (0.08%)/ PECO (1.41%)/ PEPCO (2.43%) / PPL (0.53%) / PSEG (1.25%) / RE (0.05%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.4	Chesterfield 230 kV substation scope: Replace all terminal equipment, line leads, and bus at Chesterfield 230 kV substation to be rated to 4000A		AEC (0.39%) / AEP (0.58%) / APS (0.94%) / ATSI (3.48%) / BGE (2.10%) / ComEd (0.44%) / DL (1.05%) / Dominion (83.53%) / DPL (0.71%)/ JCPL (0.75%) / ME (0.28%) / NEPTUNE* (0.08%)/ PECO (1.41%)/ PEPCO (2.43%) / PPL (0.53%) / PSEG (1.25%) / RE (0.05%)
b4030.5	Chesterfield 230 kV substation scope: Install a new 230 kV, 80kA 4000A circuit breaker at Chesterfield 230 kV substation		AEC (1.11%) / AEP (1.79%) / APS (2.66%) / ATSI (9.97%) / BGE (6.01%) / ComEd (1.23%) / Dayton (0.08%) / DEOK (1.15%) / DL (3.04%) / Dominion (50.96%) / DPL (2.00%) / EKPC (0.27%) / JCPL (2.11%) / ME (0.80%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.98%) / PENELEC (0.45%) / PEPCO (7.00%) / PPL (1.49%) / PSEG (3.52%) / RE (0.13%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.6	Suffolk - Yadkin 500 kV rebuild: Rebuild approximately 13.2 miles of Suffolk - Yadkin 500 kV Line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.32%) / AEP (27.31%) / APS (0.26%) / ATSI (0.11%) / BGE (0.06%) / ComEd (0.10%) / Dayton (3.19%) / DEOK (6.22%) / DL (0.10%) / Dominion (37.28%) / DPL (1.67%) / EKPC (4.12%) / JCPL (3.83%) / ME (0.07%) / NEPTUNE* (0.43%) / OVEC (0.09%) / PECO (4.49%) / PENELEC (1.03%) / PEPCO (0.19%) / PPL (0.14%) / PSEG (7.71%)/ RE (0.28%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.7	Suffolk 500 kV substation scope: Replace all terminal equipment at Suffolk 500 kV substation to be rated to 5000A		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.32%) / AEP (27.31%) / APS (0.26%) / ATSI (0.11%) / BGE (0.06%) / ComEd (0.10%) / Dayton (3.19%) / DEOK (6.22%) / DL (0.10%) / Dominion (37.28%) / DPL (1.67%) / EKPC (4.12%) / JCPL (3.83%) / ME (0.07%) / NEPTUNE* (0.43%) / OVEC (0.09%) / PECO (4.49%) / PENELEC (1.03%) / PEPCO (0.19%) / PPL (0.14%) / PSEG (7.71%)/ RE (0.28%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.8	Yadkin 500 kV substation scope: Replace all terminal equipment at Yadkin 500 kV substation to be rated to 5000A		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.32%) / AEP (27.31%) / APS (0.26%) / ATSI (0.11%) / BGE (0.06%) / ComEd (0.10%) / Dayton (3.19%) / DEOK (6.22%) / DL (0.10%) / Dominion (37.28%) / DPL (1.67%) / EKPC (4.12%) / JCPL (3.83%) / ME (0.07%) / NEPTUNE* (0.43%) / OVEC (0.09%) / PECO (4.49%) / PENELEC (1.03%) / PEPCO (0.19%) / PPL (0.14%) / PSEG (7.71%)/ RE (0.28%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.9	Charlottesville - Fork Union 230 kV rebuild: Wreck and rebuild approximately 24 miles of Charlottesville - Fork Union 230 kV line		AEC (0.89%) / AEP (4.25%) / APS (1.41%) / ATSI (12.51%) / BGE (0.70%) / ComEd (1.65%) / Dayton (0.46%) / DEOK (1.50%) / DL (3.88%) / Dominion (57.84%) / DPL (1.34%) / EKPC (0.81%) / JCPL (2.17%) / ME (0.43%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.13%) / PENELEC (0.25%) / PEPCO (1.09%) / PPL (1.40%) / PSEG (3.90%) / RE (0.14%)
b4030.10	Fork Union - Bremo 230 kV rebuild: Wreck and rebuild approximately 1.74 miles of Fork Union - Bremo 230 kV line		AEC (0.43%) / AEP (1.82%) / APS (12.82%) / ATSI (6.83%) / BGE (1.04%) / ComEd (0.85%) / Dayton (0.15%) / DEOK (7.70%) / DL (2.05%) / Dominion (32.28%) / DPL (0.62%) / EKPC (2.50%) / JCPL (1.11%) / ME (3.30%) / NEPTUNE* (0.12%) / OVEC (0.04%) / PECO (1.52%) / PENELEC (0.23%) / PEPCO (13.44%) / PPL (9.02%) / PSEG (2.06%) / RE (0.07%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.11	Charlottesville 230 kV substation scope: Replace all terminal equipment at Charlottesville 230 kV substation to support the new line conductor ratings of the Charlottesville - Fork Union 230 kV rebuild		AEC (0.60%) / AEP (19.49%) / APS (6.46%) / ATSI (8.51%) / BGE (0.47%) / ComEd (1.11%) / Dayton (0.31%) / DEOK (6.85%) / DL (2.62%) / Dominion (29.01%) / DPL (0.90%) / EKPC (3.64%) / JCPL (1.46%) / ME (1.98%) / NEPTUNE* (0.16%) / OVEC (0.04%) / PECO (2.11%) / PENELEC (0.17%) / PEPCO (4.99%) / PPL (6.41%) / PSEG (2.62%) / RE (0.09%)
b4030.12	Fork Union 230 kV substation scope: Replace all terminal equipment at Fork Union 230 kV substation to support the new line conductor ratings of the Charlottesville - Fork Union 230 kV rebuild		AEC (0.89%) / AEP (4.25%) / APS (1.41%) / ATSI (12.51%) / BGE (0.70%) / ComEd (1.65%) / Dayton (0.46%) / DEOK (1.50%) / DL (3.88%) / Dominion (57.84%) / DPL (1.34%) / EKPC (0.81%) / JCPL (2.17%) / ME (0.43%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.13%) / PENELEC (0.25%) / PEPCO (1.09%) / PPL (1.40%) / PSEG (3.90%) / RE (0.14%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.13	Fork Union 230 kV substation scope: Replace all terminal equipment at Fork Union 230 kV substation to support the new conductor ratings of the Fork Union - Bremo 230 kV rebuild		AEC (0.43%) / AEP (1.82%) / APS (12.82%) / ATSI (6.83%) / BGE (1.04%) / ComEd (0.85%) / Dayton (0.15%) / DEOK (7.70%) / DL (2.05%) / Dominion (32.28%) / DPL (0.62%) / EKPC (2.50%) / JCPL (1.11%) / ME (3.30%) / NEPTUNE* (0.12%) / OVEC (0.04%) / PECO (1.52%) / PENELEC (0.23%) / PEPCO (13.44%) / PPL (9.02%) / PSEG (2.06%) / RE (0.07%)
b4030.14	Bremo 230 kV substation scope: Replace all terminal equipment at Bremo 230 kV substation to support the new conductor ratings of the Fork Union - Bremo 230 kV rebuild		AEC (0.43%) / AEP (1.82%) / APS (12.82%) / ATSI (6.83%) / BGE (1.04%) / ComEd (0.85%) / Dayton (0.15%) / DEOK (7.70%) / DL (2.05%) / Dominion (32.28%) / DPL (0.62%) / EKPC (2.50%) / JCPL (1.11%) / ME (3.30%) / NEPTUNE* (0.12%) / OVEC (0.04%) / PECO (1.52%) / PENELEC (0.23%) / PEPCO (13.44%) / PPL (9.02%) / PSEG (2.06%) / RE (0.07%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4030.15	Mt. Eagle Tap 230 kV substation scope: Upgrade disconnect switches at Mt. Eagle Tap 230 kV substation to 4000 A		AEC (0.89%) / AEP (4.25%) / APS (1.41%) / ATSI (12.51%) / BGE (0.70%) / ComEd (1.65%) / Dayton (0.46%) / DEOK (1.50%) / DL (3.88%) / Dominion (57.84%) / DPL (1.34%) / EKPC (0.81%) / JCPL (2.17%) / ME (0.43%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.13%) / PENELEC (0.25%) / PEPCO (1.09%) / PPL (1.40%) / PSEG (3.90%) / RE (0.14%)
b4030.16	Sycamore Springs 230 kV substation scope: Reset relays at Sycamore Springs 230 kV substation		AEC (1.11%) / AEP (1.79%) / APS (2.66%) / ATSI (9.97%) / BGE (6.01%) / ComEd (1.23%) / Dayton (0.08%) / DEOK (1.15%) / DL (3.04%) / Dominion (50.96%) / DPL (2.00%) / EKPC (0.27%) / JCPL (2.11%) / ME (0.80%) / NEPTUNE* (0.24%) / OVEC (0.01%) / PECO (3.98%) / PENELEC (0.45%) / PEPCO (7.00%) / PPL (1.49%) / PSEG (3.52%) / RE (0.13%)
b4031.1	Wreck and rebuild Line No. 5 using conductor with minimum summer rating of 393 MVA		Dominion (100%)
b4031.2	At Bremo substation, upgrade relevant equipment below 2000A, such as line leads, breakers, switches and CTs to accommodate the upgraded line 5		Dominion (100%)
b4031.3	At Fork Union substation, upgrade relevant equipment below 2000 A, such as line leads, breakers, switches and CTs to accommodate the upgraded line 5		Dominion (100%)

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Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4034.1	The existing line 2016 in the corridor will be cut into the Goalders Creek three-breaker ring bus station such that the remaining section of line going to Harmony Village will be renumbered to 2XX1		AEC (0.67%) / AEP (2.90%) / APS (2.06%) / ATSI (1.53%) / BGE (3.95%) / ComEd (10.43%) / Dayton (0.06%) / DEOK (0.26%) / DL (0.34%) / Dominion (60.33%) / DPL (1.24%) / ECP** (0.06%) / EKPC (0.43%) / HTP*** (0.04%) / JCPL (1.60%) / ME (2.14%) / NEPTUNE* (0.17%) / PECO (2.52%) / PENELEC (0.13%) / PEPCO (3.90%) / PPL (1.52%) / PSEG (3.71%) / RE (0.01%)
b4034.2	This project involves installing a new 230/115 kV TX1 transformer using a 115 kV breaker and associated switches, as well as a new 230 kV line from Lanexa and Harmony Village with a 230 kV breaker and associated switches		AEC (0.67%) / AEP (2.90%) / APS (2.06%) / ATSI (1.53%) / BGE (3.95%) / ComEd (10.43%) / Dayton (0.06%) / DEOK (0.26%) / DL (0.34%) / Dominion (60.33%) / DPL (1.24%) / ECP** (0.06%) / EKPC (0.43%) / HTP*** (0.04%) / JCPL (1.60%) / ME (2.14%) / NEPTUNE* (0.17%) / PECO (2.52%) / PENELEC (0.13%) / PEPCO (3.90%) / PPL (1.52%) / PSEG (3.71%) / RE (0.01%)
b4034.3	This project at Harmony Village substation requires a relay reset only on Line 2016 relays		AEC (0.67%) / AEP (2.90%) / APS (2.06%) / ATSI (1.53%) / BGE (3.95%) / ComEd (10.43%) / Dayton (0.06%) / DEOK (0.26%) / DL (0.34%) / Dominion (60.33%) / DPL (1.24%) / ECP** (0.06%) / EKPC (0.43%) / HTP*** (0.04%) / JCPL (1.60%) / ME (2.14%) / NEPTUNE* (0.17%) / PECO (2.52%) / PENELEC (0.13%) / PEPCO (3.90%) / PPL (1.52%) / PSEG (3.71%) / RE (0.01%)

*Neptune Regional Transmission System, LLC
** East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4034.4	This project at Lanexa substation requires a relay reset only on Line 2016 relays		AEC (0.67%) / AEP (2.90%) / APS (2.06%) / ATSI (1.53%) / BGE (3.95%) / ComEd (10.43%) / Dayton (0.06%) / DEOK (0.26%) / DL (0.34%) / Dominion (60.33%) / DPL (1.24%) / ECP** (0.06%) / EKPC (0.43%) / HTP*** (0.04%) / JCPL (1.60%) / ME (2.14%) / NEPTUNE* (0.17%) / PECO (2.52%) / PENELEC (0.13%) / PEPCO (3.90%) / PPL (1.52%) / PSEG (3.71%) / RE (0.01%)
b4052.6	Aspen 500 kV remote work for Dickerson (new 500 kV) - Aspen line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (0.40%) / Dayton (0.11%) / Dominion (99.20%) / EKPC (0.29%)

*Neptune Regional Transmission System, LLC
** East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.1	Uprate 500 kV Line #560 terminal equipment at Possum Point substation so as not to limit the conductor rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.16%) / AEP (3.00%) / APS (4.93%) / ATSI (1.22%) / BGE (13.58%) / ComEd (0.47%) / Dayton (0.36%) / DEOK (0.93%) / DL (0.17%) / Dominion (28.08%) / DPL (0.74%) / EKPC (0.51%) / JCPL (1.09%) / ME (0.89%) / NEPTUNE* (0.12%) / OVEC (0.01%) / PECO (0.53%) / PENELEC (0.09%) / PEPCO (34.86%) / PPL (7.38%) / PSEG (0.85%)/ RE (0.03%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.2	Rebuild approximately 0.19 mile segment of 500 kV Line #560 from Possum Point substation (structure 560/1A) to Burches Interconnection (structure 560/1F) using 6000A conductor		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.16%) / AEP (3.00%) / APS (4.93%) / ATSI (1.22%) / BGE (13.58%) / ComEd (0.47%) / Dayton (0.36%) / DEOK (0.93%) / DL (0.17%) / Dominion (28.08%) / DPL (0.74%) / EKPC (0.51%) / JCPL (1.09%) / ME (0.89%) / NEPTUNE* (0.12%) / OVEC (0.01%) / PECO (0.53%) / PENELEC (0.09%) / PEPCO (34.86%) / PPL (7.38%) / PSEG (0.85%)/ RE (0.03%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.3	Construct a new bipolar +/- 525 kV HVDC link connecting Heritage and Mosby substations, where the link has a capability of transmitting 3000 MW. The HVDC link, approximately 185 miles in length, will be fully routed underground between the two new proposed converter stations, one at Heritage and one at Mosby	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.76%) / AEP (0.79%) / APS (3.33%) / ATSI (3.16%) / BGE (4.17%) / ComEd (0.82%) / Dayton (0.02%) / DEOK (0.12%) / DL (1.20%) / Dominion (70.76%) / DPL (1.44%) / EKPC (0.16%) / JCPL (1.28%) / ME (0.85%) / NEPTUNE* (0.14%) / PECO (2.69%) / PENELEC (0.17%) / PEPCO (4.49%) / PPL (1.58%) / PSEG (2.00%) / RE (0.07%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.4	Design and construct a new Voltage Source Converter (VSC) HVDC station at Heritage substation to support the new HVDC link		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.76%) / AEP (0.79%) / APS (3.33%) / ATSI (3.16%) / BGE (4.17%) / ComEd (0.82%) / Dayton (0.02%) / DEOK (0.12%) / DL (1.20%) / Dominion (70.76%) / DPL (1.44%) / EKPC (0.16%) / JCPL (1.28%) / ME (0.85%) / NEPTUNE* (0.14%) / PECO (2.69%) / PENELEC (0.17%) / PEPCO (4.49%) / PPL (1.58%) / PSEG (2.00%) / RE (0.07%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.5	Design and construct a new Voltage Source Converter (VSC) HVDC station at Mosby substation to support the new HVDC link		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.76%) / AEP (0.79%) / APS (3.33%) / ATSI (3.16%) / BGE (4.17%) / ComEd (0.82%) / Dayton (0.02%) / DEOK (0.12%) / DL (1.20%) / Dominion (70.76%) / DPL (1.44%) / EKPC (0.16%) / JCPL (1.28%) / ME (0.85%) / NEPTUNE* (0.14%) / PECO (2.69%) / PENELEC (0.17%) / PEPCO (4.49%) / PPL (1.58%) / PSEG (2.00%) / RE (0.07%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.6	Rebuild 20 miles of 500 kV Line #576 from North Anna substation to Vontay substation using 6000A conductor	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.29%) / AEP (36.57%) / APS (2.18%) / ATSI (0.06%) / BGE (2.72%) / ComEd (0.27%) / Dayton (6.00%) / DEOK (16.17%) / DL (0.23%) / Dominion (21.57%) / DPL (0.62%) / EKPC (7.10%) / JCPL (0.35%) / ME (0.35%) / NEPTUNE* (0.04%) / OVEC (0.12%) / PECO (1.04%) / PENELEC (0.03%) / PEPCO (3.45%) / PPL (0.38%) / PSEG (0.44%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.7	Upgrade/install 6000A equipment at North Anna substation to support the new conductor termination	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.29%) / AEP (36.57%) / APS (2.18%) / ATSI (0.06%) / BGE (2.72%) / ComEd (0.27%) / Dayton (6.00%) / DEOK (16.17%) / DL (0.23%) / Dominion (21.57%) / DPL (0.62%) / EKPC (7.10%) / JCPL (0.35%) / ME (0.35%) / NEPTUNE* (0.04%) / OVEC (0.12%) / PECO (1.04%) / PENELEC (0.03%) / PEPCO (3.45%) / PPL (0.38%) / PSEG (0.44%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.8	Build a new 500 kV line from Elmont - Kraken (approximately 31 miles). The new line will be constructed primarily of double-circuit 500kV/230 kV monopole structures. The proposed route follows existing 230 kV Line #2032 from Elmont–Hanover–Four Rivers and 230 kV Line #256 from Four Rivers–Kings Dominion–St Johns–Kraken	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.83%) / AEP (0.04%) / APS (4.58%) / ATSI (3.18%) / BGE (7.79%) / ComEd (0.82%) / Dayton (0.01%) / DEOK (0.04%) / DL (1.28%) / Dominion (61.01%) / DPL (1.70%) / EKPC (0.03%) / JCPL (1.13%) / ME (0.96%) / NEPTUNE* (0.13%) / PECO (2.95%) / PENELEC (0.17%) / PEPCO (10.25%) / PPL (1.46%) / PSEG (1.58%) / RE (0.06%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.9	Construct one new 500 kV line terminal position at the existing Elmont substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.83%) / AEP (0.04%) / APS (4.58%) / ATSI (3.18%) / BGE (7.79%) / ComEd (0.82%) / Dayton (0.01%) / DEOK (0.04%) / DL (1.28%) / Dominion (61.01%) / DPL (1.70%) / EKPC (0.03%) / JCPL (1.13%) / ME (0.96%) / NEPTUNE* (0.13%) / PECO (2.95%) / PENELEC (0.17%) / PEPCO (10.25%) / PPL (1.46%) / PSEG (1.58%) / RE (0.06%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.11	Cut and loop Line #5008 into Mosby substation, which will result in two 500 kV lines: Line #5008 Morrisville - Mosby and Line #9573 Mosby - Wishing Star	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.94%) / APS (8.02%) / ATSI (1.05%) / BGE (5.97%) / ComEd (0.46%) / DL (0.48%) / Dominion (64.66%) / DPL (1.94%) / JCPL (1.29%) / ME (1.57%) / NEPTUNE* (0.14%) / PECO (3.37%) / PENELEC (0.07%) / PEPCO (5.47%) / PPL (2.70%) / PSEG (1.80%) / RE (0.07%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.12	Install two 500 kV breakers and all associated terminal equipment in the available bay adjacent to existing breaker XT590 to achieve a redundant breaker arrangement. Upgrade existing terminal equipment to 500 kV, 5000A 63 kAIC standards including breaker (XT590), disconnect switches (59078, X74), leads and bus work. Install two 500 kV breakers and all associated terminal equipment in the available bay adjacent to existing breaker 55972 to achieve a redundant breaker arrangement. Upgrade existing terminal equipment to 500 kV, 5000A 63 kAIC standards including breaker (55972), disconnect switches (55975, 55974), leads and bus work		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (1.38%) / APS (10.36%) / ATSI (4.93%) / BGE (3.30%) / ComEd (0.71%) / DEOK (0.37%) / DL (1.61%) / Dominion (57.74%) / DPL (2.61%) / JCPL (2.34%) / ME (1.99%) / NEPTUNE* (0.26%) / PECO (4.93%) / PENELEC (0.26%) / PEPCO (0.01%) / PPL (3.38%) / PSEG (3.69%) / RE (0.13%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.13	Construct a new 765/500 kV Vontay switching station at the crossing of 500 kV Line #553 Cunningham – Elmont and 765 kV line Joshua Falls – Yeat. Develop two 765 kV line terminal positions and three 500 kV line terminal positions. Install one 765/500 kV transformer, with provisions for a future second transformer		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.06%) / AEP (7.23%) / APS (20.84%) / ATSI (37.28%) / BGE (0.26%) / ComEd (0.05%) / Dayton (0.73%) / DEOK (1.40%) / DL (0.63%) / Dominion (1.07%) / DPL (0.02%) / EKPC (0.56%) / JCPL (0.38%) / ME (0.10%) / NEPTUNE* (0.04%) / OVEC (0.02%) / PECO (0.18%) / PENELEC (0.11%) / PEPCO (13.57%) / PPL (14.59%) / PSEG (0.85%) / RE (0.03%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.14	Loop 500 kV Line #553 into the new Vontay substation, which will result in two 500 kV lines: Cunningham – Vontay and Vontay – Elmont	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.15%) / AEP (36.99%) / APS (2.14%) / ATSI (0.02%) / BGE (2.26%) / ComEd (0.92%) / Dayton (1.84%) / DEOK (2.89%) / DL (0.24%) / Dominion (41.30%) / DPL (0.42%) / EKPC (0.30%) / ME (0.16%) / OVEC (0.06%) / PECO (0.55%) / PENELEC (0.83%) / PEPCO (3.15%) / PPL (4.80%) / PSEG (0.95%) / RE (0.03%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.15	Loop 500 kV Line #576 into the new Vontay substation, which will result in two 500 kV lines: from North Anna – Vontay and Vontay – Midlothian		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.29%) / AEP (36.57%) / APS (2.18%) / ATSI (0.06%) / BGE (2.72%) / ComEd (0.27%) / Dayton (6.00%) / DEOK (16.17%) / DL (0.23%) / Dominion (21.57%) / DPL (0.62%) / EKPC (7.10%) / JCPL (0.35%) / ME (0.35%) / NEPTUNE* (0.04%) / OVEC (0.12%) / PECO (1.04%) / PENELEC (0.03%) / PEPCO (3.45%) / PPL (0.38%) / PSEG (0.44%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.16	Loop 765 kV Joshua Falls – Yeat into the new Vontay substation, which will result in two 765 kV lines: from Joshua Falls - Vontay and Vontay - Yeat		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.74%) / APS (6.75%) / BGE (8.90%) / ComEd (0.64%) / Dominion (65.27%) / DPL (1.76%) / JCPL (0.53%) / ME (0.96%) / NEPTUNE* (0.06%) / PECO (2.70%) / PEPCO (11.37%) / PPL (0.15%) / PSEG (0.16%) / RE (0.01%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.17	Replace equipment on the 500 kV side of Carson substation with 5000A equipment		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.72%) / AEP (0.88%) / APS (1.90%) / ATSI (5.19%) / BGE (4.01%) / ComEd (1.15%) / Dayton (2.09%) / DEOK (0.30%) / DL (1.75%) / Dominion (60.98%) / DPL (1.32%) / EKPC (6.90%) / JCPL (1.30%) / ME (0.61%) / NEPTUNE* (0.14%) / OVEC (0.03%) / PECO (2.56%) / PENELEC (0.25%) / PEPCO (4.62%) / PPL (1.13%) / PSEG (2.09%) / RE (0.08%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.18	Rebuild approximately 37.4 miles of 500 kV Line #563 from Carson - Midlothian. The proposed structures to be installed are mainly 500/230 kV double-circuit V-string suspension towers. The 230 kV circuit position will be vacant at the completion of this project but serves to accommodate a future 230 kV line	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.72%) / AEP (0.88%) / APS (1.90%) / ATSI (5.19%) / BGE (4.01%) / ComEd (1.15%) / Dayton (2.09%) / DEOK (0.30%) / DL (1.75%) / Dominion (60.98%) / DPL (1.32%) / EKPC (6.90%) / JCPL (1.30%) / ME (0.61%) / NEPTUNE* (0.14%) / OVEC (0.03%) / PECO (2.56%) / PENELEC (0.25%) / PEPCO (4.62%) / PPL (1.13%) / PSEG (2.09%) / RE (0.08%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.19	Uprate 500 kV Line #563 associated terminal equipment at Carson to 5000A standards	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.72%) / AEP (0.88%) / APS (1.90%) / ATSI (5.19%) / BGE (4.01%) / ComEd (1.15%) / Dayton (2.09%) / DEOK (0.30%) / DL (1.75%) / Dominion (60.98%) / DPL (1.32%) / EKPC (6.90%) / JCPL (1.30%) / ME (0.61%) / NEPTUNE* (0.14%) / OVEC (0.03%) / PECO (2.56%) / PENELEC (0.25%) / PEPCO (4.62%) / PPL (1.13%) / PSEG (2.09%) / RE (0.08%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.20	Uprate 500 kV Line #563 associated terminal equipment at Midlothian to 5000A standards		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.72%) / AEP (0.88%) / APS (1.90%) / ATSI (5.19%) / BGE (4.01%) / ComEd (1.15%) / Dayton (2.09%) / DEOK (0.30%) / DL (1.75%) / Dominion (60.98%) / DPL (1.32%) / EKPC (6.90%) / JCPL (1.30%) / ME (0.61%) / NEPTUNE* (0.14%) / OVEC (0.03%) / PECO (2.56%) / PENELEC (0.25%) / PEPCO (4.62%) / PPL (1.13%) / PSEG (2.09%) / RE (0.08%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.21	Uprate 500 kV Line #567 associated terminal equipment at Chickahominy to 5000A standards	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.46%) / AEP (29.67%) / APS (1.42%) / ATSI (3.29%) / BGE (2.79%) / ComEd (0.58%) / Dayton (4.87%) / DEOK (0.38%) / DL (1.07%) / Dominion (30.59%) / DPL (0.86%) / EKPC (15.40%) / JCPL (0.81%) / ME (0.42%) / NEPTUNE* (0.09%) / OVEC (0.02%) / PECO (1.63%) / PENELEC (0.16%) / PEPCO (3.33%) / PPL (0.81%) / PSEG (1.30%) / RE (0.05%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.22	Uprate 500 kV Line #567 associated terminal equipment at Surry to 5000A standards	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.46%) / AEP (29.67%) / APS (1.42%) / ATSI (3.29%) / BGE (2.79%) / ComEd (0.58%) / Dayton (4.87%) / DEOK (0.38%) / DL (1.07%) / Dominion (30.59%) / DPL (0.86%) / EKPC (15.40%) / JCPL (0.81%) / ME (0.42%) / NEPTUNE* (0.09%) / OVEC (0.02%) / PECO (1.63%) / PENELEC (0.16%) / PEPCO (3.33%) / PPL (0.81%) / PSEG (1.30%) / RE (0.05%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.23	Rebuild approximately 22 miles of 500 kV Line #539 Yeat - Ox using 6000A conductor on double-circuit structures with the option of adding a 230 kV line at a later time	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.44%) / APS (5.71%) / BGE (9.03%) / ComEd (0.30%) / Dominion (65.95%) / DPL (1.29%) / ME (0.19%) / PECO (1.60%) / PEPCO (14.81%) / PSEG (0.66%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.24	Upgrade 500 kV Line #539 associated equipment at Ox substation to support the new conductor rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.44%) / APS (5.71%) / BGE (9.03%) / ComEd (0.30%) / Dominion (65.95%) / DPL (1.29%) / ME (0.19%) / PECO (1.60%) / PEPCO (14.81%) / PSEG (0.66%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4053.25	Upgrade 500 kV Line #539 associated equipment at Yeat substation to support the new conductor rating		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.44%) / APS (5.71%) / BGE (9.03%) / ComEd (0.30%) / Dominion (65.95%) / DPL (1.29%) / ME (0.19%) / PECO (1.60%) / PEPCO (14.81%) / PSEG (0.66%) / RE (0.02%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.26	Rebuild 20 miles of 500 kV Line #576 from Vontay substation to Midlothian substation using 6000A conductor	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.79%) / AEP (0.93%) / APS (1.78%) / ATSI (6.34%) / BGE (4.05%) / ComEd (1.16%) / Dayton (3.25%) / DEOK (0.93%) / DL (2.02%) / Dominion (38.66%) / DPL (1.42%) / EKPC (25.19%) / JCPL (1.48%) / ME (0.59%) / NEPTUNE* (0.16%) / PECO (2.80%) / PENELEC (0.29%) / PEPCO (4.56%) / PPL (1.09%) / PSEG (2.42%) / RE (0.09%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.27	Upgrade/install 6000A equipment at Midlothian substation to support the new conductor termination from Vontay	**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.79%) / AEP (0.93%) / APS (1.78%) / ATSI (6.34%) / BGE (4.05%) / ComEd (1.16%) / Dayton (3.25%) / DEOK (0.93%) / DL (2.02%) / Dominion (38.66%) / DPL (1.42%) / EKPC (25.19%) / JCPL (1.48%) / ME (0.59%) / NEPTUNE* (0.16%) / PECO (2.80%) / PENELEC (0.29%) / PEPCO (4.56%) / PPL (1.09%) / PSEG (2.42%) / RE (0.09%)

*Neptune Regional Transmission System, LLC

Virginia Electric and Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b4053.28	Replace 500 kV circuit breakers (54265 and 553T564) and all associated equipment to Line #553 including switches and CT with 5000A equipment at Cunningham substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.15%) / AEP (36.99%) / APS (2.14%) / ATSI (0.02%) / BGE (2.26%) / ComEd (0.92%) / Dayton (1.84%) / DEOK (2.89%) / DL (0.24%) / Dominion (41.30%) / DPL (0.42%) / EKPC (0.30%) / ME (0.16%) / OVEC (0.06%) / PECO (0.55%) / PENELEC (0.83%) / PEPCO (3.15%) / PPL (4.80%) / PSEG (0.95%) / RE (0.03%)
b4053.30	Replace 230 kV 63 kA breakers 205182, 2051T2063, 221282 with 80 kA breakers at Clifton substation		Dominion (100%)
b4053.31	Replace 500 kV 40 kA breakers H1T559 with 63 kA breakers at Clifton substation		Dominion (100%)
b4053.32	Replace 230 kV 63 kA breakers H592, L292, 203292, 207592, 28392-3, H692, L192 with 80 kA breakers at Elmont substation		Dominion (100%)
b4053.33	Replace 230 kV 63 kA breakers 213732, 226132 with 80 kA breakers at Celestial substation		Dominion (100%)

*Neptune Regional Transmission System, LLC

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%)

American Transmission Systems, Inc. (cont.)

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 138 kV, 69 kV, and 23 kV controls from the generating station building to new control building		ATSI (100%)
b2263	Niles Generation Station – Relocate 138 kV and 23 kV controls from the generation station building to new control building		ATSI (100%)
b2265	Ashtabula Generating Station – Relocate 138 kV controls from the generating station building to new control building		ATSI (100%)
b2284	Increase the design operating temperature on the Cloverdale – Barberton 138 kV line		ATSI (100%)
b2285	Increase the design operating temperature on the Cloverdale – Star 138 kV line		ATSI (100%)
b2301	Reconductor 0.7 miles of 605 ACSR conductor on the Beaver Black River 138 kV 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 138 kV breaker 211-B-63 with 40 kA		ATSI (100%)
b2367	Replace the East Akron 138 kV breaker 36-B-46 with 40 kA		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		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 (100%)
b2459	Install +260/-150 MVAR SVC at Lake Shore		ATSI (100%)
b2492	Replace the Beaver 138 kV breaker '426-B-2' with 63 kA breaker		ATSI (100%)
b2493	Replace the Hoytdale 138 kV breaker '83-B-30' with 63 kA 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%)

American Transmission Systems, Inc. (cont.)

Required Transmission 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 40 kA breaker		ATSI (100%)
b2742	Replace the Hoytdale 138 kV '83-B-26' and '83-B-30' breakers with 63 kA 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%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2869	Replace the Crossland 138 kV breaker "B-16" with a 40 kA 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 954 Kcmil 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%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	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%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3123	At Sammis 345 kV station: Install a new control building in the switchyard, construct a new station access road, install new switchyard power supply to separate from existing generating station power service, separate all communications circuits, and separate all protection and controls schemes		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%)
b3234	Extend both the east and west 138 kV buses at Pine substation, and install one (1) 138 kV breaker, associated disconnect switches, and one (1) 100 MVAR reactor		ATSI (100%)
b3235	Extend 138 kV bus work to the west of Tangy substation for the addition of the 100 MVAR reactor bay and one (1) 138 kV 40 kA circuit breaker		ATSI (100%)
b3236	Extend the Broadview 138 kV bus by adding two (2) new breakers and associated equipment and install a 75 MVAR reactor		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3260	Replace the existing breaker 501-B-251 with a new 69 kV breaker with a higher (40 kA) interrupting capability		ATSI (100%)
b3277	Replace the existing East Akron 138 kV breaker 'B-22' with 3000A continuous, 40 kA momentary current interrupting rating circuit breaker		ATSI (100%)
b3282	Install a second 345/138 kV transformer at Hayes, 448 MVA nameplate rating. Add one 345 kV circuit breaker (3000A) to provide transformer high-side connection between breaker B-18 and the new breaker. Connect the new transformer low side to the 138 kV bus. Add one 138 kV circuit breaker (3000A) at Hayes 138 kV substation between B-42 and the new breaker. Relocate the existing 138 kV No. 1 capacitor bank between B-42 and the new breaker. Protection per First Energy standard		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3678	Expand Galion 138 kV substation, Install 100 MVAR reactor, associated breaker and relaying		ATSI (100%)
b3679	Replace West Fremont 138/69 kV Transformer #2 with a transformer having additional high-side taps		ATSI (100%)
b3680	Replace limiting substation conductors on Ashtabula 138 kV exit to make transmission line conductor the limiting element at Sanborn 138 station		ATSI (100%)
b3713	Disconnect and remove five 138 kV bus tie lines and associated equipment from the Avon Lake Substation to the plant (800-B Bank, 8-AV-T Generator, 5-AV-T, 6-AV-T, and 7-AV-T). Disconnect and remove one 345 kV bus tie line and associated equipment from the Avon substation to the plant (Unit 9). Adjust relay settings at Avon Lake, Avon and Avondale substations. Removal/rerouting of fiber to the plant and install new fiber between the 345 kV and 138 kV yards for the Q4-AV-BUS relaying. Remove SCADA RTU, communications and associated equipment from plant.		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3714	Replace four 345 kV disconnect switches (D74, D92, D93, & D116) with 3000 A disconnect switches at Beaver station. Replace dual 954 45/7 ACSR SCCIR conductors between 5" pipe and WT with new, which meets or exceeds ratings of SN: 1542 MVA, SSTE: 1878 MVA at Beaver station. Replace 3000 SAC TL drop and 3000 SAC SCCIR between 954 ACSR and 5" bus with new, which meets or exceeds ratings of SN: 1542 MVA, SSTE: 1878 MVA at Beaver station. Upgrade BDD relays at breaker B-88 and B-115 at Beaver station. Relay settings changes at Hayes station.		ATSI (100%)
b3720	Rebuild the 69 kV Abbe – Johnson #2 Line (approximately 4.9 miles) with 556 kcmil ACSR conductor. Replace three disconnect switches (A17, D15 & D16) and line drops and revise relay settings at Abbe. Replace one disconnect switch (A159) and line drops and revise relay settings at Johnson. Replace two MOAB disconnect switches (A4 & A5), one disconnect switch (D9), and line drops at Redman		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3721	Rebuild and reconductor the Avery – Hayes 138 kV line (approximately 6.5 miles) with 795 kcmil 26/7 ACSR		ATSI (100%)
b3777	Disconnect and remove three 345 kV breakers, foundations and associated equipment from Sammis 345 kV substation. Remove nine 345 kV Capacitor voltage transformers. Remove two 345 kV disconnect switches. Install new 345 kV bus work and foundations. Install new fencing. Remove and adjust relaying at Sammis 345 kV substation		ATSI (100%)
b3789.0	A 69 kV, 60 MVAR shunt reactor will be installed at the Salt Springs substation. The reactor terminal will be connected to the existing 69 kV bus, and an independent-pole operation, 1200A circuit breaker will be installed for reactor switching		ATSI (100%)
b3925.1	Rebuild the 7.46 miles of Avery - Shinrock 138 kV Line with 795 kcmil 26/7 ACSS (7.46 miles)		ATSI (100%)
b3925.2	Rebuild the 13.45 miles of Greenfield - Lakeview 138 kV Line from 2 x 336.4 kcmil 26/7 ACSR to 1 x 795 kcmil 26/7 ACSS		ATSI (100%)
b3925.3	Rebuild the 6.5 miles of Avery-Hayes 138 kV Line with 795 kcmil 26/7 ACSS conductor		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3925.4	Rebuild the Greenfield - Beaver 138 kV corridor (32 miles) with 795 kcmil 26/7 ACSS. This corridor encompasses multiple 138 kV lines that are constructed on common towers		ATSI (100%)
b3978.1	Reconductor one span of transmission line outside Ottawa substation. Reconductor one span of transmission line outside Lakeview substation.		ATSI (100%)
b3978.2	Replace limiting terminal equipment at Lakeview substation: Two thermal relays, Two 138 kV disconnect switches, Limiting substation conductor.		ATSI (100%)
b3979.1	Abbe - Johnson No.1 69 kV line (Johnson - Elyria Water P.C.): Reconductor one span of transmission line between Johnson Substation and Elyria Water P.C. Replace one 69 kV disconnect switch. Upgrade one thermal relay. Modify Elyria Loop Tap configuration. Install one 69 kV disconnect switch.		ATSI (100%)
b3979.2	Abbe - Johnson No.1 69 kV line (Elyria Water P.C. - Spring Valley): Replace one 69 kV disconnect switch.		ATSI (100%)
b3979.3	Abbe - Johnson No.1 69 kV line (Spring Valley - Lorain College): Replace two 69 kV disconnect switches.		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3980.1	Bellevue-Groton 69 kV line: Rebuild 4 miles of the Bellevue - Groton 69 kV line		ATSI (100%)
b3980.2	Bellevue substation: Replace three 69 kV disconnect switches. Revise relay settings. Replace limiting substation conductor.		ATSI (100%)
b3980.3	Groton substation: Revise relay settings.		ATSI (100%)
b3984.1	Replace 69 kV circuit breakers: 501-B-24, 501-B-272, and 501-B-274		ATSI (100%)
b3985.2	Eastlake substation - Replace 12 breakers with 80 kA, 3000 A circuit breakers. This will not affect the existing line ratings at the station.		ATSI (100%)
b3985.3	Hoytdale substation – Replace 83-B-14, 83-B-18, 83-B-22 breakers with 63 kA, 3000A circuit breakers. This will not affect the Hoytdale-New Castle line ratings, which are currently rated at 435/500 SN/SE for circuit Z104 and 329/413 SN/SE for circuit Z110.		ATSI (100%)
b3985.4	Johnson substation - Replace 451-B-163 breaker with a 63 kA, 3000 A circuit breaker.		ATSI (100%)
b4041.1	2024W1 P5: Install battery monitoring, DC panel, line panel, and modify relay wiring: Addressing FG No. 2024-P5-ATSI15.		ATSI (100%)
b4050.1	2024W1 P5: Modify relay wiring: Addressing FG No. 2024-P5-ATSI05.		ATSI (100%)

American Transmission Systems, Inc. (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4051.1	2024W1 P5: Install open battery monitoring and modify relay wiring: Addressing FG No. 2024-P5-ATSI09.		ATSI (100%)
b4068.5	Teddy 765/345 kV substation scope: Construct a new 765/345 kV greenfield substation interconnecting the new 765 kV Marysville line and the new 765 kV Greentown line with three 100 MVAR single-phase reactors on each 765 kV line. Install nine 765 kV circuit breakers. Install two 765/345 kV, 2250 MVA transformers. Install nine 345 kV circuit breakers.		AEC (0.08%) / AEP (70.91%) / ATSI (4.64%) / BGE (0.64%) / Dayton (9.40%) / DEOK (7.68%) / DL (0.70%) / Dominion (4.53%) / DPL (0.20%) / JCPL (0.03%) / ME (0.05%) / OVEC (0.07%) / PECO (0.34%) / PENELEC (0.01%) / PEPCO (0.64%) / PSEG (0.08%)
b4068.6	Teddy 765/345 kV substation: Install two 345 kV capacitor banks at Teddy substation.		ATSI (100%)
b4068.46	East Springfield - London structures: Lower the existing First Energy East Springfield 138 kV line between structures 29 and 30 on the proposed Teddy - Beatty 345 kV line.		AEC (0.18%) / AEP (38.02%) / ATSI (51.32%) / BGE (0.15%) / ComEd (0.25%) / DL (1.11%) / Dominion (6.59%) / DPL (0.28%) / JCPL (0.50%) / NEPTUNE* (0.05%) / PECO (0.73%) / PSEG (0.79%) / RE (0.03%)

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(24) Duke Energy Ohio and Duke Energy Kentucky

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2278	Revising the reclosing of Charles 138 kV breaker '919' to 15 sec		DEOK (100%)
b2451	Replace the Charles 138 kV breaker '919' with 63 kA		DEOK (100%)
b2564	Add two breakers at Miami Fort 138 kV; Interim solution to violation driven by Beckjord GTs deactivations is to lower generation at Miami Fort to 120 MW		DEOK (100%)
b2634	Convert Miami Fort 345 kV substation to a ring bus terminating Feeder 4504, TB 9 and TB 10 in separate ring positions		DEOK (100%)
b2828	Install 5% reactors at Miami Fort 138 kV to limit current		DEOK (100%)
b2829	Reconductor feeder from Port Union to East Provident 138 kV line for 300 MVA		DEOK (100%)
b2830	Expand Garver 345 kV substation to include 138 kV. Install 1-345 kV breaker, 1-345/138 kV 400 MVA transformer, 6-138 kV Breakers and bus work. Connect local 138 kV circuits from Todhunter, Rockies Express, and Union		DEOK (100%)
b2831.2	Upgrade the Tanner Creek - Miami Fort 345 kV circuit (DEOK portion)		**DFAX Allocation:** Dayton (51.51%) / DEOK (48.49%)
b2894	Replace Todhunter 138 kV breakers '931', '919', and '913' with 80 kA breakers		DEOK (100%)

Duke Energy Ohio and Duke Energy Kentucky (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2895	Replace Dicks Creek 138 kV breaker '963' with 63 kA breaker		DEOK (100%)
b2901	Reconductor the Port Union – Mulhauser 138 kV line with 954 ASCR bringing the summer ratings to A/B/C=300/300/300 MVA		DEOK (100%)
b2977	Portion of 2017_1-6A		DEOK (100%)
b2977.1	Install a new 345 kV breaker "1422" so Pierce 345/138 kV transformer #18 is now fed in a double breaker, double bus configuration		DEOK (100%)
b2977.2	Remove X-533 No. 2 to the first tower outside the station. Install a new first tower for X-533 No. 2		DEOK (100%)
b2977.3	Install a new 345 kV breaker B and move the Buffington – Pierce 345 kV feeder to the B-C junction. Install a new tower at the first tower outside the station for Buffington – Pierce 345 kV line		DEOK (100%)
b2977.4	Remove breaker A and move the Pierce 345/138 kV transformer #17 feed to the C-D junction		DEOK (100%)
b2977.5	Replace breaker 822 at Beckjord 138 kV substation to increase the rating from Pierce to Beckjord 138 kV to 603 MVA		DEOK (100%)
b3048	Replace 138 kV breakers 937, 941 and 945 at Todhunter station		DEOK (100%)
b3050	Install redundant relay to Port Union 138 kV Bus #2		DEOK (100%)

Duke Energy Ohio and Duke Energy Kentucky (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3334	Rebuild the section of Miami Fort - Hebron Tab 138 kV line		DEOK (100%)
b3940.1	The 345 kV ring bus at Woodsdale substation will be reconfigured into a 345 kV breaker-and-half yard to improve substation reliability. Additionally, all 2000A equipment at Woodsdale substation will be upgraded to 3000A to increase substation capacity. Currently two DEOK supplemental projects that are planned at Woodsdale substation: s3447.1 and s3601.1. DEOK will convert all s3447.1 and parts of s3601.1 to address these reliability violations.		DEOK (100%)
b3944.1	Rebuild the McGuffey to Locust 69 kV line (~1.35 miles) with 954 ACSR rail conductor and OPGW. The 54 wood poles will be replaced with light duty, steel poles. The rebuild will take place in the existing right-of-way, and the distribution underbuilds will also be restored. Conductor drops going into McGuffey and Locust substations will be replaced with 954 AAC conductor.		DEOK (100%)

Duke Energy Ohio and Duke Energy Kentucky (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4003.1	Rebuild the College Corner (AEP)-Collinsville (DEOK) 138 kV circuit from the OH/IN state line (tower 10P-X1-129) to Collinsville substation. AEP owns approximately 0.1 miles of the line from College Corner substation to the OH/IN state line. DEOK owns the remaining 11.90 miles from the state line to Collinsville substation. The entire 11.90 miles section that DEOK owns will be rebuilt with 954ACSS/TW conductor (@ 200C) and new double-circuit structures. The College Corner (AEP)-Trenton (DEOK) line is on the other side of the double-circuit structure and will also be rebuilt. DEOK will be doing a route survey to see if easement updates and/or additional structures are required.		AEC (0.12%) / BGE (1.23%) / DEOK (88.39%) / DL (0.41%) / Dominion (6.64%) / DPL (0.33%) / JCPL (0.04%) / ME (0.25%) / OVEC (0.25%) / PECO (0.49%) / PENELEC (0.04%) / PEPCO (1.39%) / PPL (0.42%)

Duke Energy Ohio and Duke Energy Kentucky (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4003.2	Rebuild parts of the College Corner (AEP)-Trenton (DEOK) 138 kV circuit that shares a common structure with the College Corner (AEP)-Collinsville (DEOK) circuit from the OH/IN state line (Tower 10P-X1-129) to Collinsville substation. AEP owns approximately 0.1 miles of the line from College Corner substation to the OH/IN state line. DEOK owns the remaining 24.19 miles from the state line to Trenton substation. Only the 11.90-mile DEOK section that shares a common structure with College Corner (AEP)-Collinsville (DEOK) will be rebuilt with 954ACSS/TW conductor (@ 200C) and new double-circuit structures. The remaining sections from Collinsville-Trenton will be left untouched. DEOK will be doing a route survey to see if easement updates and/or additional structures are required.		AEC (0.23%) / AEP (6.60%) / ATSI (8.06%) / BGE (0.88%) / ComEd (0.32%) / Dayton (70.97%) / DL (1.32%) / Dominion (8.83%) / DPL (0.41%) / JCPL (0.36%) / NEPTUNE* (0.04%) / PECO (0.92%) / PEPCO (0.72%) / PSEG (0.33%) / RE (0.01%)

*Neptune Regional Transmission System, LLC

Duke Energy Ohio and Duke Energy Kentucky (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4003.4	Update relay settings for the College Corner - Collinsville line at DEOK's Collinsville substation.		AEC (0.12%) / BGE (1.23%) / DEOK (88.39%) / DL (0.41%) / Dominion (6.64%) / DPL (0.33%) / JCPL (0.04%) / ME (0.25%) / OVEC (0.25%) / PECO (0.49%) / PENELEC (0.04%) / PEPCO (1.39%) / PPL (0.42%)
b4003.5	Update relay settings for the College Corner - Trenton line at DEOK's Trenton substation.		AEC (0.23%) / AEP (6.60%) / ATSI (8.06%) / BGE (0.88%) / ComEd (0.32%) / Dayton (70.97%) / DL (1.32%) / Dominion (8.83%) / DPL (0.41%) / JCPL (0.36%) / NEPTUNE* (0.04%) / PECO (0.92%) / PEPCO (0.72%) / PSEG (0.33%) / RE (0.01%)

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(32) NextEra Energy Transmission LLC

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3775.1	Outside of the Green Acres substation, swap the NIPSCO Green Acre Tap towers from the St. John – Green Acres – Olive 345 kV line to the University Park N – Olive 345 kV line to create University Park N – Green Acres – Olive and St. John – Olive 345 kV lines		**Reliability Driver:** ComEd (54.45%) / Dayton (45.55%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)
b3775.2	Reconductor NextEra Energy's (NEET's) section of Crete (IN/IL border) – St. John 345 kV line (6.95 miles)		**Reliability Driver:** ComEd (100%) **Market Efficiency Driver:** AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

*Neptune Regional Transmission System, LLC
**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

SCHEDULE 12 – APPENDIX A

(32) NextEra Energy Transmission LLC

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3775.8	Upgrade the existing terminal equipment (substation conductor) at St. John on the existing Crete to St. John 345 kV line with bundled 2x1590 ACSR Lapwing		**Reliability Driver:** ComEd (62.41%) / Dayton (37.59%)
			Market Efficiency Driver: AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)
b3775.9	Upgrade the existing terminal equipment (substation conductor) at Green Acres on the existing St. John to Green Acres 345 kV line with bundled 2x1590 ACSR Lapwing		**Reliability Driver:** ComEd (54.45%) / Dayton (45.55%)
			Market Efficiency Driver: AEC (0.87%) / AEP (24.07%) / APS (3.95%) / ATSI (11.04%) / BGE (4.30%) / Dayton (3.52%) / DEOK (5.35%) / Dominion (20.09%) / DPL (1.73%) / DL (2.11%) / ECP** (0.17%)/ EKPC (1.73%) / HTP*** (0.07%) / JCPL (1.98%) / ME (1.63%) / NEPTUNE* (0.43%) / OVEC (0.07%) / PECO (3.59%) / PENELEC (1.68%) / PEPCO (3.91%) / PPL (3.64%) / PSEG (3.93%) / RE (0.14%)

*Neptune Regional Transmission System, LLC
**East Coast Power, L.L.C.
***Hudson Transmission Partners, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.102	New 500 kV line from existing 502 Junction substation to Woodside 500 kV substation (bypass Black Oak) (NEET Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (25.59%) / BGE (9.79%) / Dominion (51.94%) / PEPCO (12.68%)

*Neptune Regional Transmission System, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.106	Woodside 500 kV substation, except terminations, transformer, Cap Banks and Static Synchronous Compensator (STATCOM)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (100%)
b3800.107	Line Termination work at Woodside 500 kV substation for 502 Junction to Woodside 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (25.59%) / BGE (9.79%) / Dominion (51.94%) / PEPCO (12.68%)

*Neptune Regional Transmission System, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.108	Line termination work at Woodside 500 kV substation for Woodside to Aspen 500 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.18%) / BGE (7.21%) / Dominion (72.52%) / PEPCO (11.09%)
b3800.109	Termination work for two 500/138 kV transformers at Woodside 500 kV substation		APS (100%)
b3800.110	Two 500/138 kV transformers at Woodside 500 kV substation		APS (100%)

*Neptune Regional Transmission System, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.113	Two 150 MVAR Cap banks and one +500/-300 MVAR STATCOM at Woodside 500 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (100%)
b3800.115	Line work for terminating Doubs to Bismark line for Doubs side at Woodside 500 kV substation (NEET Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (27.49%) / BGE (9.83%) / Dominion (53.78%) / PEPCO (8.90%)

*Neptune Regional Transmission System, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3800.117	Line work for terminating Doubs to Bismark line for Bismark side for Woodside 500 kV substation (NEET Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (21.09%) / BGE (6.55%) / Dominion (64.94%) / PEPCO (7.42%)
b3800.119	New 500kV transmission line from Woodside substation to Aspen substation (in DOM zone) (NEET Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (9.18%) / BGE (7.21%) / Dominion (72.52%) / PEPCO (11.09%)

*Neptune Regional Transmission System, LLC

NextEra Energy Transmission LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.14	Install two new 500 kV dead-end structures near Black Oak substation to interconnect the 502 Junction – Woodside 500 kV transmission line. Adjust Woodside protection scheme for Black Oak loop-in and remove 502 Junction tie. (NEET Scope)		APS (100%)
b4036.16	Install two new 500 kV circuit breaker at North and South bus to terminate the 765-500 kV transformers leads. Upgrade protection settings at Juniata (NextEra Work).		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(33) Keystone Appalachian Transmission Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2120	Six-Wire Lake Lynn - Lardin 138 kV circuits		APS (100%)
b2174.8	Replace relays at Mitchell substation		APS (100%)
b2174.9	Replace primary relay at Piney Fork substation		APS (100%)
b2174.10	Perform relay setting changes at Bethel Park substation		APS (100%)
b2213	Armstrong Substation: Relocate 138 kV controls from the generating station building to new control building		APS (100%)
b2300	Reconductor from Lake Lynn - West Run 138 kV		APS (100%)
b2341	Install 39.6 MVAR Capacitor at Shaffers Corner 138 kV Substation		APS (100%)
b2362	Install a 250 MVAR SVC at Squab Hollow 230 kV		APS (100%)
b2362.1	Install a 230 kV breaker at Squab Hollow 230 kV substation		APS (100%)
b2363	Convert the Shingletown 230 kV bus into a 6 breaker ring bus		APS (100%)
b2364	Install a new 230/138 kV transformer at Squab Hollow 230 kV substation. Loop the Forest - Elko 230 kV line into Squab Hollow. Loop the Brookville - Elko 138 kV line into Squab Hollow		APS (100%)
b2412	Install a 44 MVAR 138 kV capacitor at the Hempfield 138 kV substation		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2440	Replace the Cabot 138kV breaker 'C9-KISKI VLY' with 63kA		APS (100%)
b2546	Install a 51.8 MVAR (rated) 138 kV capacitor at Nyswaner 138 kV substation		APS (100%)
b2547.1	Construct a new 138 kV six breaker ring bus Hillman substation		APS (100%)
b2547.2	Loop Smith- Imperial 138 kV line into the new Hillman substation		APS (100%)
b2547.3	Install +125/-75 MVAR SVC at Hillman substation		APS (100%)
b2547.4	Install two 31.7 MVAR 138 kV capacitors		APS (100%)
b2548	Eliminate clearance de-rate on Wylie Ridge – Smith 138 kV line and upgrade terminals at Smith 138 kV, new line ratings 294 MVA (Rate A)/350 MVA (Rate B)		APS (100%)
b2612.1	Relocate All Dam 6 138 kV line and the 138 kV line to AE units 1&2		APS (100%)
b2612.2	Install 138 kV, 3000A bus-tie breaker in the open bus-tie position next to the Shaffers corner 138 kV line		APS (100%)
b2612.3	Install a 6-pole manual switch, foundation, control cable, and all associated facilities		APS (100%)
b2666	Yukon 138 kV Breaker Replacement		APS (100%)
b2666.1	Replace Yukon 138 kV breaker “Y-11(CHARL1)” with an 80 kA breaker		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2666.2	Replace Yukon 138 kV breaker "Y-13(BETHEL)" with an 80 kA breaker		APS (100%)
b2666.3	Replace Yukon 138 kV breaker "Y-18(CHARL2)" with an 80 kA breaker		APS (100%)
b2666.4	Replace Yukon 138 kV breaker "Y-19(CHARL2)" with an 80 kA breaker		APS (100%)
b2666.5	Replace Yukon 138 kV breaker "Y-4(4B-2BUS)" with an 80 kA breaker		APS (100%)
b2666.6	Replace Yukon 138 kV breaker "Y-5(LAYTON)" with an 80 kA breaker		APS (100%)
b2666.7	Replace Yukon 138 kV breaker "Y-8(HUNTING)" with an 80 kA breaker		APS (100%)
b2666.8	Replace Yukon 138 kV breaker "Y-9(SPRINGD)" with an 80 kA breaker		APS (100%)
b2666.9	Replace Yukon 138 kV breaker "Y-10(CHRL-SP)" with an 80 kA breaker		APS (100%)
b2666.10	Replace Yukon 138 kV breaker "Y-12(1-1BUS)" with an 80 kA breaker		APS (100%)
b2666.11	Replace Yukon 138 kV breaker "Y-14(4-1BUS)" with an 80 kA breaker		APS (100%)
b2666.12	Replace Yukon 138 kV breaker "Y-2(1B-BETHE)" with an 80 kA breaker		APS (100%)
b2666.13	Replace Yukon 138 kV breaker "Y-21(SHEPJ)" with an 80 kA breaker		APS (100%)
b2666.14	Replace Yukon 138 kV breaker "Y-22(SHEPHJT)" with an 80 kA breaker		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2689.3	Upgrade terminal equipment at structure 27A		APS (100%)
b2696	Upgrade 138 kV substation equipment at Butler, Shanor Manor and Krendale substations. New rating of line will be 353 MVA summer normal/422 MVA emergency		APS (100%)
b2763	Replace the breaker risers and wave trap at Bredinville 138 kV substation on the Cabrey Junction 138 kV terminal		APS (100%)
b2965	Reconductor the Charleroi – Allenport 138 kV line with 954 ACSR conductor. Replace breaker risers at Charleroi and Allenport		APS (33.72%) / DL (66.28%)
b2966	Reconductor the Yukon – Smithton – Shepler Hill Jct 138 kV line with 795 ACSS conductor. Replace Line Disconnect Switch at Yukon		APS (100%)
b2966.1	Reconductor the Yukon - Smithton - Shepler Hill Jct 138 kV line and replace terminal equipment as necessary to achieve required rating		APS (100%)
b2967	Convert the existing 6 wire Butler - Shanor Manor - Krendale 138 kV line into two separate 138 kV lines. New lines will be Butler - Keisters and Butler - Shanor Manor - Krendale 138 kV		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3005	Reconductor 3.1 mile 556 ACSR portion of Cabot to Butler 138 kV with 556 ACSS and upgrade terminal equipment. 3.1 miles of line will be reconductored for this project. The total length of the line is 7.75 miles		APS (100%)
b3006	Replace four Yukon 500/138 kV transformers with three transformers with higher rating and reconfigure 500 kV bus		APS (60.47%) / DL (39.53%)
b3007.1	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 ACSS replacing the existing 636 ACSR conductor. At Social Hall, meters, relays, bus conductor, a wave trap, circuit breaker and disconnects will be replaced		APS (100%)
b3010	Replace terminal equipment at Keystone and Cabot 500 kV buses. At Keystone, bus tubing and conductor, a wave trap, and meter will be replaced. At Cabot, a wave trap and bus conductor will be replaced		APS (100%)
b3011.1	Construct new Route 51 substation and connect 10 138 kV lines to new substation		DL (100%)
b3011.2	Upgrade terminal equipment at Yukon to increase rating on Yukon to Charleroi #2 138 kV line (New Yukon to Route 51 #4 138 kV line)		APS (8.19%) / DL (91.81%)
b3011.3	Upgrade terminal equipment at Yukon to increase rating on Yukon to Route 51 #1 138 kV line		DL (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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		APS (8.19%) / DL (91.81%)
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%)
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%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3064.3	Upgrade line relaying at Piney Fork and Bethel Park for Piney Fork – Elrama 138 kV line and Bethel Park – Elrama 138 kV		APS (100%)
b3068	Reconductor the Yukon – Westraver 138 kV line (2.8 miles), replace the line drops and relays at Yukon 138 kV and replace switches at Westraver 138 kV bus		APS (100%)
b3069	Reconductor the Westraver – Route 51 138 kV line (5.63 miles) and replace line switches at Westraver 138 kV bus		APS (100%)
b3070	Reconductor the Yukon – Route 51 #1 138 kV line (8 miles), replace the line drops, relays and line disconnect switch at Yukon 138 kV bus		APS (100%)
b3071	Reconductor the Yukon – Route 51 #2 138 kV line (8 miles) and replace relays at Yukon 138 kV bus		APS (100%)
b3072	Reconductor the Yukon – Route 51 #3 138 kV line (8 miles) and replace relays at Yukon 138 kV bus		APS (100%)
b3074	Reconductor the 138 kV bus at Armstrong substation		APS (100%)
b3075	Replace the 500/138 kV transformer breaker and reconductor 138 kV bus at Cabot substation		APS (100%)
b3076	Reconductor the Edgewater – Loyalhanna 138 kV line (0.67 mile)		APS (100%)
b3083	Reconductor the 138 kV bus at Butler and reconductor the 138 kV bus and replace line trap at Karns City		APS (100%)
b3214.1	Reconductor the Yukon – Smithton – Shepler Hill Jct 138 kV Line. Upgrade terminal equipment at Yukon and replace line relaying at Mitchell and Charleroi		APS (5.95%) / DL (94.05%)
b3214.2	Reconductor the Smithton – Shepler Hill Jct 138 kV Line		APS (8.38%) / DL (91.62%)
b3230	At Enon substation install a second 138 kV, 28.8 MVAR nameplate, capacitor and the associated 138 kV capacitor switcher		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3318	Reconductor the Shanor Manor - Butler 138 kV line with an upgraded circuit breaker at Butler 138 kV station		APS (100%)
b3325	Reconductor the Charleroi - Union 138 kV line and upgrade terminal equipment at Charleroi 138 kV station		APS (100%)
b3681	Upgrade the Shingletown #82 230/46 kV Transformer circuit by installing a 230 kV breaker and disconnect switches, removing existing 230 kV switches, replacing 46 kV disconnect switches, replacing limiting substation conductor, and installing/replacing relays		APS (100%)
b3710	Reconductor AA2-161 to Yukon 138 kV Lines #1 and #2 with 954 ACSS conductor		APS (100%)
b3738	Replace limiting terminal equipment on Charleroi – Dry Run 138 kV line		APS (100%)
b3739	Replace limiting terminal equipment on Dry Run – Mitchell 138 kV line		APS (100%)
b3740	Replace limiting terminal equipment on Glen Falls –Bridgeport 138 kV line		APS (100%)
b3741	Replace limiting terminal equipment on Yukon - Charleroi #1 138 kV line		APS (100%)
b3742	Replace limiting terminal equipment on Yukon - Charleroi #2 138 kV line		APS (100%)
b3744	Replace one span of 1272 ACSR from Krendale substation to structure 35 (approximately 630 feet) Replace one span of 1272 ACSR from Shanor Manor to structure 21 (approximately 148 feet) Replace 1272 ACSR risers at Krendale and Shanor Manor substations Replace 1272 ACSR substation conductor at Krendale substation Replace relaying at Krendale substation Revise relay settings at Butler and Shanor Manor substations		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b3745	Install redundant relaying at Carbon Center 230 kV substation		APS (100%)
b3761	Install 138 kV breaker on the Ridgway 138/46 kV #2 Transformer		APS (100%)
b3773	Install 33 MVAR switched capacitor, 138 kV breaker, and associated relaying at McConnellsburg 138 kV substation		APS (100%)
b3870.1	At Federal Street Substation: - Install (3) 138 kV CCVTs on the 138 kV bus. - Remove the Transformer 1 CO-6 138 kV Phase relay overcurrent relays. - Install (1) SEL-421 relay on the high side of Transformer 1. - Install foundations, conduit, and grounding for new CCVTs. - Install cables between CCVTs and relay.		APS (100%)

Keystone Appalachian Transmission Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.2	Upgrade South Bend terminal of Keystone - South Bend 500 kV line.		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / Dominion (14.85%) / DPL (2.53%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / Neptune* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.04%) / AEP (0.36%) / APS (2.13%) / ATSI (11.52%) / BGE (12.47%) / ComEd (0.99%) / Dayton (0.21%) / DEOK (0.32%) / DL (0.42%) / Dominion (2.48%) / DPL (4.33%) / EKPC (0.08%) / JCPL (6.39%) / ME (1.27%) / NEPTUNE* (0.68%) / PECO (0.12%) / PENELEC (1.05%) / PEPCO (0.26%) / PPL (43.08%) / PSEG (11.38%) / RE (0.42%)

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(34) Valley Link Transmission Co., LLC

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.2	Construct a new 175 miles Amos – Welton Spring 765 kV line (AEP Section of the line is 30 miles)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)
b4000.3	Construct a new 175 miles Amos – Welton Spring 765 kV line (APS/FE Section of the line is 145 miles)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.4	Construct a new 765 kV switchyard (Welton Spring)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)
b4000.5	Install four 250 MVAR shunt capacitors, and a +/-500 MVAR STATCOM at Welton Spring 765 kV substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (100%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.6	Construct a new 86 miles Welton Spring to Rocky Point 765 kV line (Welton Spring to DVP local area, roughly 21 miles) (VA Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)
b4000.7	Construct a new 86 miles Welton Spring to Rocky Point 765 kV line (in DVP local area/Millville to Lovettsville section, roughly 10.5 miles)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.8	Construct a new 86 miles Welton Spring to Rocky Point 765 kV line (DVP local area to Rocky Point, roughly 4.8 miles)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)
b4000.9	Construct a new substation called Rocky Point with a 765 kV and a 500 kV yard. Loop in the Doubs-Goose Creek 500 kV line, the Doubs-Aspen 500 kV line, and the Woodside-Goose Creek 500 kV line. Install two 765/500 kV transformer at Rocky Point substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.99%) / BGE (8.29%) / Dominion (67.55%) / PEPCO (9.17%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.10	Install four 250 MVAR cap banks (two on 765 and two on 500 kV side) and a +/-500 MVAR STATCOM on the 765 kV Rocky Point yard		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (100%)
b4000.15	Construct a new 86 miles Welton Spring to Rocky Point 765 kV line (Welton Spring to DVP local area, roughly 50 miles) (WV Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (14.67%) / BGE (8.11%) / Dominion (66.09%) / DPL (2.15%) / PEPCO (8.98%)
b4000.346	Cut-in 500 kV line from Kraken substation into Yeat substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** Dominion (100%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.348	Build a new 500/230kV substation called Kraken. The 500 kV, 5000A ring bus will be set up for a redundant breaker configuration. Install (2) 1400MVA 500/230 kV transformers. A new redundant breaker ring will be added at Kraken to accommodate the new 500 kV line from North Anna to Kraken		Dominion (100%)
b4000.355	Build a new 156 mile 765 kV line from Joshua Falls – Yeat (roughly 69.3 miles in AEP section)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** APS (9.11%) / BGE (6.49%) / Dominion (75.72%) / PEPCO (8.68%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4000.356	Build a new 156 mile 765 kV line from Joshua Falls – Yeat (roughly 86.7 miles in Dominion section)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** APS (9.11%) / BGE (6.49%) / Dominion (75.72%) / PEPCO (8.68%)
b4000.357	Build a new 765/500/230 kV substation called Yeat. Install (2) 765/500 kV transformers. Cut in 500 kV line Bristers – Ox and 500 kV line Meadowbrook – Vint Hill into Yeat		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** Dominion (89.71%) / PEPCO (10.29%)
b4000.358	Build a new 765/500/230 kV substation called Yeat. Install (1) 500/230 kV transformer. Cut in 230 kV line Vint Hill – Elk Run into Yeat substation		Dominion (100%)

*Neptune Regional Transmission System, LLC

Valley Link Transmission Co., LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4052.5	Rocky Point 500 kV remote work for Dickerson (new 500 kV) - Rocky Point line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** APS (1.64%) / Dominion (83.16%) / PEPCO (14.87%) / PPL (0.33%)
b4053.10	Construct one new 500 kV line terminal position at the proposed Kraken substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.83%) / AEP (0.04%) / APS (4.58%) / ATSI (3.18%) / BGE (7.79%) / ComEd (0.82%) / Dayton (0.01%) / DEOK (0.04%) / DL (1.28%) / Dominion (61.01%) / DPL (1.70%) / EKPC (0.03%) / JCPL (1.13%) / ME (0.96%) / NEPTUNE* (0.13%) / PECO (2.95%) / PENELEC (0.17%) / PEPCO (10.25%) / PPL (1.46%) / PSEG (1.58%) / RE (0.06%)

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(36) Kammer Juniata Transmission, LLC

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.8	Construct a new single-circuit 765 kV transmission line between Kammer and proposed Buttermilk Falls substations. (AEP Zone). The total length of the line is 114 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.33%) / AEP (2.07%) / APS (16.49%) / ATSI (13.74%) / BGE (1.06%) / ComEd (0.04%) / Dayton (0.46%) / DEOK (0.60%) / Dominion (17.28%) / DPL (1.94%) / EKPC (0.16%) / JCPL (8.19%) / ME (0.25%) / NEPTUNE* (0.88%) / OVEC (0.01%) / PECO (8.84%) / PENELEC (0.01%) / PEPCO (10.67%) / PPL (1.93%) / PSEG (12.59%) / RE (0.46%)

*Neptune Regional Transmission System, LLC

(36) Kammer Juniata Transmission, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.9	Construct a new single-circuit 765 kV transmission line between Kammer and proposed Buttermilk Falls substations. (APS Zone). The total length of the line is 114 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.33%) / AEP (2.07%) / APS (16.49%) / ATSI (13.74%) / BGE (1.06%) / ComEd (0.04%) / Dayton (0.46%) / DEOK (0.60%) / Dominion (17.28%) / DPL (1.94%) / EKPC (0.16%) / JCPL (8.19%) / ME (0.25%) / NEPTUNE* (0.88%) / OVEC (0.01%) / PECO (8.84%) / PENELEC (0.01%) / PEPCO (10.67%) / PPL (1.93%) / PSEG (12.59%) / RE (0.46%)

*Neptune Regional Transmission System, LLC

Kammer Juniata Transmission, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.10	Construct a new single-circuit 765 kV transmission line between Kammer and proposed Buttermilk Falls substations. (PENELEC Zone). The total length of the line is 114 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** AEC (2.33%) / AEP (2.07%) / APS (16.49%) / ATSI (13.74%) / BGE (1.06%) / ComEd (0.04%) / Dayton (0.46%) / DEOK (0.60%) / Dominion (17.28%) / DPL (1.94%) / EKPC (0.16%) / JCPL (8.19%) / ME (0.25%) / NEPTUNE* (0.88%) / OVEC (0.01%) / PECO (8.84%) / PENELEC (0.01%) / PEPCO (10.67%) / PPL (1.93%) / PSEG (12.59%) / RE (0.46%)
b4036.11	Construct a new single-circuit 765 kV transmission line between proposed Buttermilk Falls and proposed Mountain Stone substations. (PENELEC Zone). The total length of the line is 108 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) _____ **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)

*Neptune Regional Transmission System, LLC

Kammer Juniata Transmission, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.12	Construct a new single-circuit 765 kV transmission line between proposed Buttermilk Falls and proposed Mountain Stone substations. (PPL Zone). The total length of the line is 108 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)
b4036.13	765/500 kV substation work at new Mountain Stone		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)

*Neptune Regional Transmission System, LLC

Kammer Juniata Transmission, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4036.14	765/500 kV substation work at new Buttermilk station		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEP (39.60%) / APS (0.01%) / ATSI (1.94%) / BGE (13.56%) / ComEd (0.80%) / Dayton (14.90%) / DEOK (20.50%) / DL (0.01%) / Dominion (0.03%) / DPL (0.01%) / EKPC (3.38%) / JCPL (2.45%) / ME (0.01%) / NEPTUNE* (0.24%) / OVEC (0.12%) / PEPCO (0.01%) / PPL (0.24%) / PSEG (2.11%) / RE (0.08%)
b4036.18	Construct two new single-circuit 500 kV t-lines between proposed Mountain Stone substation and Juniata substation. The total length of the line is 0.6 miles		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (2.80%) / APS (10.78%) / Dominion (7.01%) / DPL (2.47%) / JCPL (9.72%) / ME (4.98%) / NEPTUNE* (1.06%) / PECO (10.53%) / PEPCO (4.81%) / PPL (29.75%) / PSEG (15.53%) / RE (0.56%)

*Neptune Regional Transmission System, LLC

SCHEDULE 12 – APPENDIX A

(36) Grid Growth Ohio, LLC

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.3	Greentown - Teddy 765 kV line: Construct a 49.92-mile 765 kV AC overhead transmission line between the existing Greentown 765 kV substation and the proposed Teddy 765 kV Substation. (DAYTON Portion). The total line length is 137 miles of the Greentown to Teddy 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.49%) / AEP (57.78%) / ATSI (10.07%) / BGE (1.22%) / Dayton (2.82%) / DEOK (1.49%) / DL (2.73%) / Dominion (17.64%) / DPL (0.83%) / JCPL (0.96%) / NEPTUNE* (0.10%) / PECO (1.84%) / PEPCO (0.83%) / PSEG (1.16%) / RE (0.04%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.4	Greentown - Teddy 765 kV line: Construct a 27.08-mile 765 kV AC overhead transmission line between the existing Greentown 765 kV substation and the proposed Teddy 765 kV substation (ATSI Portion). The total line length is 137 miles of the Greentown to Teddy 765 kV line		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.49%) / AEP (57.78%) / ATSI (10.07%) / BGE (1.22%) / Dayton (2.82%) / DEOK (1.49%) / DL (2.73%) / Dominion (17.64%) / DPL (0.83%) / JCPL (0.96%) / NEPTUNE* (0.10%) / PECO (1.84%) / PEPCO (0.83%) / PSEG (1.16%) / RE (0.04%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.7	Teddy - Marysville 765 kV: Construct 35.4-mile 765 kV AC overhead transmission line between the proposed 765 kV Teddy substation and the existing 765 kV Marysville substation (FE Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.98%) / AEP (31.45%) / ATSI (16.09%) / BGE (1.84%) / DEOK (0.01%) / DL (5.13%) / Dominion (33.05%) / DPL (1.58%) / JCPL (2.08%) / NEPTUNE* (0.23%) / PECO (3.61%) / PEPCO (0.95%) / PSEG (2.90%) / RE (0.10%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.8	Teddy - Marysville 765 kV: Construct 35.4-mile 765 kV AC overhead transmission line between the proposed 765 kV Teddy substation and the existing 765 kV Marysville substation (AEP Portion)		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.98%) / AEP (31.45%) / ATSI (16.09%) / BGE (1.84%) / DEOK (0.01%) / DL (5.13%) / Dominion (33.05%) / DPL (1.58%) / JCPL (2.08%) / NEPTUNE* (0.23%) / PECO (3.61%) / PEPCO (0.95%) / PSEG (2.90%) / RE (0.10%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.11	Teddy - Beatty single-circuit 345 kV: Construct a new 18.66-mile 345 kV line between the proposed Teddy 345 kV substation and existing Beatty 345 kV substation on a shared structure with Teddy - Cole single-circuit 345 kV (FE portion). The total length of Teddy - Beatty 345 kV circuit is 32 miles		AEC (0.07%) / AEP (52.14%) / APS (0.21%) / ATSI (5.33%) / BGE (1.11%) / Dayton (17.06%) / DEOK (15.21%) / DL (0.72%) / Dominion (5.65%) / DPL (0.24%) / JCPL (0.03%) / ME (0.17%) / OVEC (0.16%) / PECO (0.36%) / PENELEC (0.11%) / PEPCO (1.26%) / PPL (0.17%)
b4068.12	Teddy - Beatty single-circuit 345 kV: Construct a new 13.34-mile 345 kV line between the proposed Teddy 345 kV substation and existing Beatty 345 kV substation on a shared structure with Teddy - Cole single-circuit 345 kV (AEP portion). The total length of Teddy - Beatty 345 kV circuit is 32 miles		AEC (0.07%) / AEP (52.14%) / APS (0.21%) / ATSI (5.33%) / BGE (1.11%) / Dayton (17.06%) / DEOK (15.21%) / DL (0.72%) / Dominion (5.65%) / DPL (0.24%) / JCPL (0.03%) / ME (0.17%) / OVEC (0.16%) / PECO (0.36%) / PENELEC (0.11%) / PEPCO (1.26%) / PPL (0.17%)

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.13	Teddy - Cole single-circuit 345 kV: Construct a new 18.66 miles long 345 kV line between the proposed Teddy 345 kV substation and existing Cole 345 kV substation on a shared structure with Teddy - Beatty single circuit 345 kV. (FE portion). The total length of Teddy - Cole 345 kV circuit is 41.7 miles		AEC (0.14%) / AEP (71.90%) / ATSI (6.72%) / BGE (0.53%) / Dayton (7.26%) / DEOK (4.58%) / DL (1.09%) / Dominion (6.15%) / DPL (0.27%) / JCPL (0.21%) / NEPTUNE* (0.02%) / OVEC (0.03%) / PECO (0.56%) / PEPCO (0.43%) / PSEG (0.11%)
b4068.14	Teddy - Cole single-circuit 345 kV: Construct a new 32-mile 345 kV line between the proposed Teddy 345 kV substation and existing Cole 345 kV substation on a shared structure with Teddy - Beatty single circuit 345 kV (AEP portion). The total length of Teddy - Cole 345 kV circuit is 41.7 miles		AEC (0.14%) / AEP (71.90%) / ATSI (6.72%) / BGE (0.53%) / Dayton (7.26%) / DEOK (4.58%) / DL (1.09%) / Dominion (6.15%) / DPL (0.27%) / JCPL (0.21%) / NEPTUNE* (0.02%) / OVEC (0.03%) / PECO (0.56%) / PEPCO (0.43%) / PSEG (0.11%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.19	Guernsey - Conesville 765 kV: Construct a new 32-mile single-circuit 765 kV AC overhead transmission line between the existing Guernsey 765 kV substation and the new 765 kV Conesville substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.03%) / AEP (66.51%) / APS (5.68%) / ATSI (0.18%) / BGE (1.32%) / ComEd (0.60%) / Dayton (8.97%) / DEOK (9.44%) / DL (0.20%) / Dominion (0.84%) / DPL (0.04%) / EKPC (1.30%) / JCPL (0.09%) / ME (0.76%) / NEPTUNE* (0.01%) / OVEC (0.15%) / PECO (0.13%) / PENELEC (0.03%) / PEPCO (2.69%) / PPL (0.89%) / PSEG (0.13%) / RE (0.01%)

*Neptune Regional Transmission System, LLC

Grid Growth Ohio, LLC (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b4068.26	West Millersport - Adkins 765 kV: Construct a new 38-mile single-circuit 765 kV AC overhead transmission line between the new 765 kV West Millersport substation and the new 765 kV Adkins substation		**Load-Ratio Share Allocation:** AEC (1.63%) / AEP (14.27%) / APS (5.89%) / ATSI (7.62%) / BGE (3.96%) / ComEd (12.47%) / Dayton (2.04%) / DEOK (3.12%) / DL (1.62%) / DPL (2.53%) / Dominion (14.85%) / EKPC (2.26%) / JCPL (3.78%) / ME (1.81%) / NEPTUNE* (0.41%) / OVEC (0.07%) / PECO (5.04%) / PENELEC (1.75%) / PEPCO (3.62%) / PPL (4.85%) / PSEG (6.16%) / RE (0.25%) **DFAX Allocation:** AEC (0.37%) / AEP (60.00%) / ATSI (18.56%) / Dayton (0.90%) / DL (4.97%) / Dominion (4.35%) / DPL (0.16%) / JCPL (1.62%) / ME (0.84%) / NEPTUNE* (0.17%) / PECO (1.39%) / PENELEC (0.79%) / PEPCO (3.03%) / PSEG (2.75%) / RE (0.10%)

*Neptune Regional Transmission System, LLC