

Attachment 1A
Public Service Electric and Gas Company Tariff Sheets

Attachment 1B
Jersey Central Power and Light Tariff Sheets

Attachment 1C
Rockland Electric Company Tariff Sheets

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

B.P.U.N.J. No. 15 ELECTRIC

XXX Revised Sheet No. 75

Superseding

XXX Revised Sheet No. 75

**BASIC GENERATION SERVICE – RESIDENTIAL SMALL COMMERCIAL PRICING (BGS-RSCP)
ELECTRIC SUPPLY CHARGES**

APPLICABLE TO:

Default electric supply service for Rate Schedules RS, RHS, RLM, WH, WHS, HS, BPL, BPL-POF, PSAL, GLP and LPL-Secondary (less than 500 kilowatts).

BGS ENERGY CHARGES:

Applicable to Rate Schedules RS, RHS, RLM, WH, WHS, HS, BPL, BPL-POF and PSAL

Charges per kilowatthour:

Rate Schedule	For usage in each of the months of <u>October through May</u>		For usage in each of the months of <u>June through September</u>	
	Charges		Charges	
	<u>Charges</u>	<u>Including SUT</u>	<u>Charges</u>	<u>Including SUT</u>
RS – first 600 kWh	\$0.111099	\$0.118459	\$0.111074	\$0.118433
RS – in excess of 600 kWh	0.111099	0.118459	0.120170	0.128131
RHS – first 600 kWh	0.088781	0.094663	0.084176	0.089753
RHS – in excess of 600 kWh	0.088781	0.094663	0.096338	0.102720
RLM On-Peak	0.199211	0.212409	0.212038	0.226086
RLM Off-Peak	0.050399	0.053738	0.045310	0.048312
WH	0.049065	0.052316	0.046813	0.049914
WHS	0.049245	0.052507	0.046520	0.049602
HS	0.095573	0.101905	0.097495	0.103954
BPL	0.046908	0.050016	0.041926	0.044704
BPL-POF	0.046908	0.050016	0.041926	0.044704
PSAL	0.046908	0.050016	0.041926	0.044704

The above Basic Generation Service Energy Charges reflect costs for Energy, Generation Capacity, Transmission, and Ancillary Services (including PJM Interconnection, L.L.C. (PJM) Administrative Charges). The portion of these charges related to Network Integration Transmission Service, including the PJM Seams Elimination Cost Assignment Charges, the PJM Reliability Must Run Charge and PJM Transmission Enhancement Charges may be changed from time to time on the effective date of such change to the PJM rate for these charges as approved by the Federal Energy Regulatory Commission (FERC).

Kilowatt threshold noted above is based upon the customer's Peak Load Share of the overall summer peak load assigned to Public Service by the Pennsylvania-New Jersey-Maryland Office of the Interconnection (PJM). See Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions of this Tariff.

Date of Issue:

Issued by SCOTT S. JENNINGS, Vice President Finance – PSE&G
80 Park Plaza, Newark, New Jersey 07102
Filed pursuant to Order of Board of Public Utilities dated
in Docket No.

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PUBLIC SERVICE ELECTRIC AND GAS COMPANY

XXX Revised Sheet No. 79

B.P.U.N.J. No. 15 ELECTRIC

Superseding

XXX Revised Sheet No. 79

BASIC GENERATION SERVICE – RESIDENTIAL SMALL COMMERCIAL PRICING (BGS-RSCP)

ELECTRIC SUPPLY CHARGES

(Continued)

BGS CAPACITY CHARGES:

Applicable to Rate Schedules GLP and LPL-Sec.

Charges per kilowatt of Generation Obligation:

Charge applicable in the months of June through September\$ 5.1628

Charge including New Jersey Sales and Use Tax (SUT)\$ 5.5048

Charge applicable in the months of October through May\$ 5.1628

Charge including New Jersey Sales and Use Tax (SUT)\$ 5.5048

The above charges shall recover each customer's share of the overall summer peak load assigned to the Public Service Transmission Zone by the PJM Interconnection, L.L.C. (PJM) as adjusted by PJM assigned capacity related factors and shall be in accordance with Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions.

BGS TRANSMISSION CHARGES

Applicable to Rate Schedules GLP and LPL-Sec.

Charges per kilowatt of Transmission Obligation:

Currently effective Annual Transmission Rate for
Network Integration Transmission Service for the
Public Service Transmission Zone as derived from the
FERC Electric Tariff of the PJM Interconnection, LLC\$ 101,196.71 per MW per year

PJM Reallocation\$ 0.00 per MW per year

PJM Seams Elimination Cost Assignment Charges\$ 0.00 per MW per month

PJM Reliability Must Run Charge\$ 2.82 per MW per month

PJM Transmission Enhancements

Trans-Allegheny Interstate Line Company\$ 84.40 per MW per month

Virginia Electric and Power Company\$ 88.04 per MW per month

Potomac-Appalachian Transmission Highline L.L.C.(\$10.28) per MW per month

PPL Electric Utilities Corporation\$ 50.71 per MW per month

American Electric Power Service Corporation\$ 31.06 per MW per month

Atlantic City Electric Company.\$ 10.03 per MW per month

Delmarva Power and Light Company\$ 0.32 per MW per month

Potomac Electric Power Company\$ 2.86 per MW per month

Baltimore Gas and Electric Company\$ 3.61 per MW per month

Jersey Central Power and Light\$ 66.74 per MW per month

Mid Atlantic Interstate Transmission\$ 7.24 per MW per month

PECO Energy Company\$ 20.64 per MW per month

Above rates converted to a charge per kW of Transmission

Obligation, applicable in all months\$ 8.7911

Charge including New Jersey Sales and Use Tax (SUT)\$ 9.3735

The above charges shall recover each customer's share of the overall summer peak transmission load assigned to the Public Service Transmission Zone by the PJM Interconnection, L.L.C. (PJM) as adjusted by PJM assigned transmission capacity related factors and shall be in accordance with Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions. These charges will be changed from time to time on the effective date of such change to the PJM rate for charges for Network Integration Transmission Service, including the PJM Seams Elimination Cost Assignment Charges, the PJM Reliability Must Run Charge and PJM Transmission Enhancement Charges as approved by Federal Energy Regulatory Commission (FERC).

Date of Issue:

Effective:

Issued by SCOTT S. JENNINGS, Vice President Finance – PSE&G

80 Park Plaza, Newark, New Jersey 07102

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PUBLIC SERVICE ELECTRIC AND GAS COMPANY

XXX Revised Sheet No. 83

B.P.U.N.J. No. 15 ELECTRIC

Superseding

XXX Revised Sheet No. 83

BASIC GENERATION SERVICE – COMMERCIAL AND INDUSTRIAL ENERGY PRICING (CIEP)

ELECTRIC SUPPLY CHARGES

(Continued)

BGS TRANSMISSION CHARGES

Charges per kilowatt of Transmission Obligation:

Currently effective Annual Transmission Rate for	
Network Integration Transmission Service for the	
Public Service Transmission Zone as derived from the	
FERC Electric Tariff of the PJM Interconnection, LLC	\$ 101,196.71 per MW per year
PJM Reallocation	\$ 0.00 per MW per year
PJM Seams Elimination Cost Assignment Charges	\$ 0.00 per MW per month
PJM Reliability Must Run Charge	\$ 2.82 per MW per month
PJM Transmission Enhancements	
Trans-Allegheny Interstate Line Company	\$ 84.40 per MW per month
Virginia Electric and Power Company	\$ 88.04 per MW per month
Potomac-Appalachian Transmission Highline L.L.C.	(\$10.28) per MW per month
PPL Electric Utilities Corporation	\$ 50.71 per MW per month
American Electric Power Service Corporation	\$ 31.06 per MW per month
Atlantic City Electric Company	\$ 10.03 per MW per month
Delmarva Power and Light Company	\$ 0.32 per MW per month
Potomac Electric Power Company	\$ 2.86 per MW per month
Baltimore Gas and Electric Company	\$ 3.61 per MW per month
Jersey Central Power and Light	\$ 66.74 per MW per month
Mid Atlantic Interstate Transmission	\$ 7.24 per MW per month
PECO Energy Company	\$ 20.64 per MW per month

Above rates converted to a charge per kW of Transmission	
Obligation, applicable in all months	\$ 8.7911
Charge including New Jersey Sales and Use Tax (SUT)	\$ 9.3735

The above charges shall recover each customer's share of the overall summer peak transmission load assigned to the Public Service Transmission Zone by the PJM Interconnection, L.L.C. (PJM) as adjusted by PJM assigned transmission capacity related factors and shall be in accordance with Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions. These charges will be changed from time to time on the effective date of such charge to the PJM rate for charges for Network Integration Transmission Service, including the PJM Seams Elimination Cost Assignment Charges, the PJM Reliability Must Run Charge and PJM Transmission Enhancement Charges as approved by Federal Energy Regulatory Commission (FERC).

Kilowatt threshold noted above is based upon the customer's Peak Load Share of the overall summer peak load assigned to Public Service by the Pennsylvania-New Jersey-Maryland Office of the Interconnection (PJM). See Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions of this Tariff.

Date of Issue:

Issued by SCOTT S. JENNINGS, Vice President Finance – PSE&G
80 Park Plaza, Newark, New Jersey 07102
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Effective:

Rider BGS-RSCP
Basic Generation Service – Residential Small Commercial Pricing
(Applicable to Service Classifications RS, RT, RGT, GS, GST, OL, SVL, MVL, ISL and LED)

2) BGS Transmission Charge per KWH: As provided in the respective tariff for Service Classifications RS, RT, RGT, GS, GST, OL, SVL, MVL, ISL and LED. Effective September 1, 2017, a RMR (BL England) surcharge of **\$0.000131** per KWH (includes Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage. Effective January 1, 2018, a RMR (Yorktown) surcharge of **\$0.000011** per kWh (includes Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage.

Effective September 1, 2018, the following TEC surcharges (include Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage, except lighting under Service Classifications OL, SVL, MVL, ISL and LED:

TRAILCO-TEC surcharge of **\$0.000355** per KWH
PEPCO-TEC surcharge of **\$0.000012** per KWH
ACE-TEC surcharge of **\$0.000074** per KWH
Delmarva-TEC surcharge of **\$0.000001** per KWH
PPL-TEC surcharge of **\$0.000197** per KWH
BG&E-TEC surcharge of **\$0.000016** per KWH
PECO-TEC surcharge of **\$0.000062** per KWH

Effective February 10, 2018, the following TEC surcharges (include Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage, except lighting under Service Classifications OL, SVL, MVL, ISL and LED:

AEP-East-TEC surcharge of **\$0.000115** per KWH
PATH-TEC surcharge of **(\$0.000039)** per KWH
VEPCO-TEC surcharge of **\$0.000341** per KWH
PSEG-TEC surcharge of **\$0.001513** per KWH
MAIT-TEC surcharge of **\$0.000030** per KWH

3) BGS Reconciliation Charge per KWH: (\$0.004284) (includes Sales and Use Tax as provided in Rider SUT)

The above BGS Reconciliation Charge recovers the difference between the payments to BGS suppliers and the revenues from BGS customers for Basic Generation Service and is subject to quarterly true-up.

Issued:

Effective: September 1, 2018

Filed pursuant to Order of Board of Public Utilities
Docket No. dated

Issued by James V. Fakult, President
300 Madison Avenue, Morristown, NJ 07962-1911

Rider BGS-CIEP
Basic Generation Service – Commercial Industrial Energy Pricing
 (Applicable to Service Classifications GP and GT and
 Certain Customers under Service Classifications GS and GST)

3) BGS Transmission Charge per KWH: (Continued)

Effective September 1, 2018, the following TEC surcharges (include Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage:

	<u>TRAILCO-TEC</u>	<u>PEPCO-TEC</u>	<u>ACE-TEC</u>	
GS and GST	\$0.000355	\$0.000012	\$0.000074	
GP	\$0.000237	\$0.000009	\$0.000049	
GT	\$0.000215	\$0.000007	\$0.000045	
GT – High Tension Service	\$0.000053	\$0.000002	\$0.000011	
	<u>Delmarva-TEC</u>	<u>PPL-TEC</u>	<u>BG&E-TEC</u>	<u>PECO-TEC</u>
GS and GST	\$0.000001	\$0.000197	\$0.000016	\$0.000062
GP	\$0.000001	\$0.000131	\$0.000011	\$0.000042
GT	\$0.000001	\$0.000119	\$0.000010	\$0.000037
GT – High Tension Service	\$0.000000	\$0.000030	\$0.000002	\$0.000010

Effective February 10, 2018, the following TEC surcharges (include Sales and Use Tax as provided in Rider SUT) will be added to the BGS Transmission Charge applicable to all KWH usage:

	<u>AEP-East-TEC</u>	<u>PATH-TEC</u>	<u>VEPCO-TEC</u>	<u>PSEG-TEC</u>
GS and GST	\$0.000115	(\$0.000039)	\$0.000341	\$0.001513
GP	\$0.000078	(\$0.000027)	\$0.000231	\$0.001024
GT	\$0.000073	(\$0.000025)	\$0.000213	\$0.000944
GT – High Tension Service	\$0.000018	(\$0.000006)	\$0.000052	\$0.000230
	<u>MAIT-TEC</u>			
GS and GST	\$0.000030			
GP	\$0.000020			
GT	\$0.000019			
GT – High Tension Service	\$0.000004			

4) BGS Reconciliation Charge per KWH: (\$0.002867) (includes Sales and Use Tax as provided in Rider SUT)

The above BGS Reconciliation Charge recovers the difference between the payments to BGS suppliers and the revenues from BGS customers for Basic Generation Service and is subject to quarterly true-up.

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Issued by James V. Fakult, President
 300 Madison Avenue, Morristown, NJ 07962-1911

**SERVICE CLASSIFICATION NO. 1
RESIDENTIAL SERVICE (Continued)**

RATE – MONTHLY (Continued)

(3) Transmission Charges

- (a) These charges apply to all customers taking Basic Generation Service from the Company. These charges are also applicable to customers located in the Company's Central and Western Divisions and obtaining Competitive Energy Supply. These charges are not applicable to customers located in the Company's Eastern Division and obtaining Competitive Energy Supply. The Company's Eastern, Central and Western Divisions are defined in General Information Section No. 1.

	<u>Summer Months*</u>	<u>Other Months</u>
All kWh @	1.583 ¢ per kWh	1.583 ¢ per kWh

- (b) Transmission Surcharge – This charge is applicable to all customers taking Basic Generation Service from the Company and includes surcharges related to Reliability Must Run and Transmission Enhancement Charges.

All kWh @	0.881 ¢ per kWh	0.881 ¢ per kWh
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(4) Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, and Securitization Charges

The provisions of the Company's Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, and Securitization Charges as described in General Information Section Nos. 33, 34, and 35, respectively, shall be assessed on all kWh delivered hereunder.

* Definition of Summer Billing Months - June through September

(Continued)

ISSUED:

EFFECTIVE:

ISSUED BY: Robert Sanchez, President
Mahwah, New Jersey 07430

DRAFT

Revised Leaf No. 90
Superseding Leaf No. 90

**SERVICE CLASSIFICATION NO. 2
GENERAL SERVICE (Continued)**

RATE – MONTHLY (Continued)

(3) Transmission Charges (Continued)

- (b) Transmission Surcharge – This charge is applicable to all customers taking Basic Generation Service from the Company and includes surcharges related to Reliability Must Run and Transmission Enhancement Charges.

	<u>Summer Months*</u>	<u>Other Months</u>
<u>Secondary Voltage Service Only</u>		
All kWh@	0.547 ¢ per kWh	0.547 ¢ per kWh
<u>Primary Voltage Service Only</u>		
All kWh@	0.500 ¢ per kWh	0.500 ¢ per kWh

(4) Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, and Securitization Surcharges

The provisions of the Company's Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, and Securitization Charges as described in General Information Section Nos. 33, 34, and 35, respectively, shall be assessed on all kWh delivered hereunder.

* Definition of Summer Billing Months - June through September

(Continued)

ISSUED:

EFFECTIVE:

ISSUED BY: Robert Sanchez, President
Mahwah, New Jersey 07430

DRAFT

Revised Leaf No. 96
Superseding Leaf No. 96

**SERVICE CLASSIFICATION NO. 3
RESIDENTIAL TIME-OF-DAY HEATING SERVICE (Continued)**

RATE – MONTHLY (Continued)

(3) Transmission Charge

- (a) These charges apply to all customers taking Basic Generation Service from the Company. These charges are also applicable to customers located in the Company's Central and Western Divisions and obtaining Competitive Energy Supply. These charges are not applicable to customers located in the Company's Eastern Division and obtaining Competitive Energy Supply. The Company's Eastern, Central and Western Divisions are defined in General Information Section No. 1.

Summer Months*

Other Months

Peak

All kWh measured between 10:00
a.m. and 10:00 p.m., Monday
through Friday@

1.583 ¢ per kWh

1.583 ¢ per kWh

Off-Peak

All other kWh@

1.583 ¢ per kWh

1.583 ¢ per kWh

- (b) Transmission Surcharge – This charge is applicable to all customers taking Basic Generation Service from the Company and includes surcharges related to Reliability Must Run and Transmission Enhancement Charges.

All kWh@

0.538 ¢ per kWh

0.538 ¢ per kWh

(4) Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, and Securitization Charges

The provisions of the Company's Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, and Securitization Charges, as described in General Information Section Nos. 33, 34, and 35, respectively, shall be assessed on all kWh delivered hereunder.

* Definition of Summer Billing Months - June through September

(Continued)

ISSUED:

EFFECTIVE:

ISSUED BY: Robert Sanchez, President
Mahwah, New Jersey 07430

**SERVICE CLASSIFICATION NO. 5
RESIDENTIAL SPACE HEATING SERVICE (Continued)**

RATE - MONTHLY (Continued)

(3) Transmission Charge

- (a) These charges apply to all customers taking Basic Generation Service from the Company. These charges are also applicable to customers located in the Company's Central and Western Divisions and obtaining Competitive Energy Supply. These charges are not applicable to customers located in the Company's Eastern Division and obtaining Competitive Energy Supply. The Company's Eastern, Central and Western Divisions are defined in General Information Section No. 1.

	<u>Summer Months*</u>	<u>Other Months</u>
All kWh @	1.583 ¢ per kWh	1.583 ¢ per kWh

- (b) Transmission Surcharge – This charge is applicable to all customers taking Basic Generation Service from the Company and includes surcharges related to Reliability Must Run and Transmission Enhancement Charges.

All kWh @	0.584 ¢ per kWh	0.584 ¢ per kWh
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(4) Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, and Securitization Charges

The provisions of the Company's Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, and Securitization Charges as described in General Information Section Nos. 33, 34, and 35, respectively, shall be assessed on all kWh delivered hereunder.

* Definition of Summer Billing Months - June through September

(Continued)

ISSUED:

EFFECTIVE:

ISSUED BY: Robert Sanchez, President
Mahwah, New Jersey 07430

**SERVICE CLASSIFICATION NO. 7
LARGE GENERAL TIME-OF-DAY SERVICE (Continued)**

RATE– MONTHLY (Continued)

(3) Transmission Charges (Continued)

(a) (Continued)

		<u>Primary</u>	<u>High Voltage Distribution</u>
<u>Demand Charge</u>			
Period I	All kW @	\$2.55 per kW	\$2.55 per kW
Period II	All kW @	0.67 per kW	0.67 per kW
Period III	All kW @	2.55 per kW	2.55 per kW
Period IV	All kW @	0.67 per kW	0.67 per kW
<u>Usage Charge</u>			
Period I	All kWh @	0.421 ¢ per kWh	0.421 ¢ per kWh
Period II	All kWh @	0.421 ¢ per kWh	0.421 ¢ per kWh
Period III	All kWh @	0.421 ¢ per kWh	0.421 ¢ per kWh
Period IV	All kWh @	0.421 ¢ per kWh	0.421 ¢ per kWh

- (b) Transmission Surcharge – This charge is applicable to all customers taking Basic Generation Service from the Company and includes surcharges related to Reliability Must Run and Transmission Enhancement Charges.

		<u>Primary</u>	<u>High Voltage Distribution</u>
All Periods	All kWh @	0.356 ¢ per kWh	0.356 ¢ per kWh

(4) Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, and Securitization Charges

The provisions of the Company's Societal Benefits Charge, Regional Greenhouse Gas Initiative Surcharge, and Securitization Charges as described in General Information Section Nos. 33, 34, and 35 respectively, shall be assessed on all kWh delivered hereunder.

(Continued)

ISSUED:

EFFECTIVE:

ISSUED BY: Robert Sanchez, President
Mahwah, New Jersey 07430

**SERVICE CLASSIFICATION NO. 7
LARGE GENERAL TIME-OF-DAY SERVICE (Continued)**

SPECIAL PROVISIONS

(A) Space Heating

Customers who take service under this classification for 10 kW or more of permanently installed space heating equipment may elect to have the electricity for this service billed separately. All monthly use shall be billed at a Distribution Charge of 3.173 ¢ per kWh during the billing months of October through May and 5.130 ¢ per kWh during the summer billing months, a Transmission Charge of 0.421 ¢ per kWh and a Transmission Surcharge of 0.356 ¢ per kWh during all billing months. The applicability of Transmission Charges and the Transmission Surcharge is described in Part (3) of RATE – MONTHLY.

When this option is requested it shall apply for at least 12 months and shall be subject to a minimum charge of \$26.87 per year per kW of space heating capacity. This provision applies for both heating and cooling where the two services are combined by the manufacturer in a single self-contained unit.

All usage under this Special Provision shall also be subject to Parts (4), (5), and (6) of RATE – MONTHLY. This Special Provision is not available to those customers taking high voltage distribution service.

This special provision is closed to new customers effective August 1, 2014.

(B) Budget Billing Plan

Any condominium association or cooperative housing corporation who takes service hereunder and any other customer taking service under Special Provision B of this Service Classification may, upon request, be billed monthly in accordance with the budget billing plan provided for in General Information Section 8 of this tariff.

(Continued)

ISSUED:

EFFECTIVE:

ISSUED BY: Robert Sanchez, President
Mahwah, New Jersey 07430

Attachment 2A
Cost Allocation of 2018/2019 TrailCo Schedule 12 Charges

Attachment 2B
Cost Allocation of 2018/2019 BG&E Schedule 12 Charges

Attachment 2C
Cost Allocation of 2018/2018 PPL Schedule 12 Charges

Attachment 2D
Cost Allocation of 2018/2019 ACE Schedule 12 Charges

Attachment 2E
Cost Allocation of 2018/2019 Delmarva Schedule 12 Charges

Attachment 2F
Cost Allocation of 2018/2019 PEPCO Schedule 12 Charges

Attachment 2G
Cost Allocation of 2018/2019 PECO Schedule 12 Charges

Attachment 2A PJM Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for Allegheny TrAILCo Projects

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
Required Transmission Enhancement <i>per PJM website</i>	PJM Upgrade ID <i>per PJM spreadsheet</i>	June 2018-May 2019 Annual Revenue Requirement <i>per PJM website</i>	Responsible Customers - Schedule 12 Appendix				Estimated New Jersey EDC Zone Charges by Project				
			ACE Zone Share ¹	JCP&L Zone Share ¹	PSE&G Zone Share ¹	RE Zone Share ¹	ACE Zone Charges	JCP&L Zone Charges	PSE&G Zone Charges	RE Zone Charges	Total NJ Zones Charges
			<i>per PJM Open Access Transmission Tariff</i>								
502 Junction-Mt Storm-Meadowbrook (>=500kV) - CWIP ¹	b0328.1; b0328.2; b0347.1; b0347.2; b0347.3; b0347.4	\$ 116,390,367.10	1.66%	3.74%	6.26%	0.26%	\$1,932,080	\$4,353,000	\$7,286,037	\$302,615	\$13,873,732
Wylie Ridge ²	b0218	\$ 2,327,769.14	11.83%	15.56%	0.00%	0.00%	\$275,375	\$362,201	\$0	\$0	\$637,576
Black Oak	b0216	\$ 4,809,312.08	1.66%	3.74%	6.26%	0.26%	\$79,835	\$179,868	\$301,063	\$12,504	\$573,270
Meadowbrook 200 MVAR capacitor	b0559	\$ 653,969.56	1.66%	3.74%	6.26%	0.26%	\$10,856	\$24,458	\$40,938	\$1,700	\$77,953
Replace Kammer 765/500 kV TXfmr	b0495	\$ 3,959,496.93	1.66%	3.74%	6.26%	0.26%	\$65,728	\$148,085	\$247,865	\$10,295	\$471,972
Doubs TXfmr 2	b0343	\$ 521,436.22	1.85%	0.00%	0.00%	0.00%	\$9,647	\$0	\$0	\$0	\$9,647
Doubs TXfmr 3	b0344	\$ 477,541.75	1.86%	0.00%	0.00%	0.00%	\$8,882	\$0	\$0	\$0	\$8,882
Doubs TXfmr 4	b0345	\$ 591,741.74	1.85%	0.00%	0.00%	0.00%	\$10,947	\$0	\$0	\$0	\$10,947
New Osage 138KV Ckt	b0674	\$ 2,021,189.84	0.00%	0.00%	0.25%	0.01%	\$0	\$0	\$5,053	\$202	\$5,255
Cap at Grover 230 Upgrade transformer 500/230	b0556	\$ 93,468.58	8.64%	18.30%	26.32%	0.98%	\$8,076	\$17,105	\$24,601	\$916	\$50,697
Build a 300 MVAR Switched Shunt at Doubs 500kV	b1153	\$ 3,063,019.33	3.86%	12.95%	21.15%	0.74%	\$118,233	\$396,661	\$647,829	\$22,666	\$1,185,388
Install 500 MVAR svc at Hunterstown 500kV Sub	b1803	\$ 547,995.64	1.66%	3.74%	6.26%	0.26%	\$9,097	\$20,495	\$34,305	\$1,425	\$65,321
Install a new 600 MVAR SVC at Meadowbrook 500 kV	b1800	\$ 4,824,064.07	1.66%	3.74%	6.26%	0.26%	\$80,079	\$180,420	\$301,986	\$12,543	\$575,028
Build 250 MVAR svc at Altoona 230kV	b1804	\$ 6,713,546.77	1.66%	3.74%	6.26%	0.26%	\$111,445	\$251,087	\$420,268	\$17,455	\$800,255
Convert Moshannon sub to 4 breaker 230 kv ring bus	b1801	\$ 3,979,083.16	6.48%	8.15%	8.19%	0.33%	\$257,845	\$324,295	\$325,887	\$13,131	\$921,158
	b1964	\$ 856,936.63	0.00%	5.48%	0.00%	0.00%	\$0	\$46,960	\$0	\$0	\$46,960
Build a 100 MVAR Fast Switched Shunt and 200 MVAR Switched Shunt at Mansfield 345 kV	b1802	\$ 155,919.37	6.48%	8.15%	8.19%	0.33%	\$10,104	\$12,707	\$12,770	\$515	\$36,095

Attachment 2A PJM Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for Allegheny TrAILCo Projects

(a)			(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Required Transmission Enhancement <i>per PJM website</i>	PJM Upgrade ID <i>per PJM spreadsheet</i>	June 2018-May 2019 Annual Revenue Requirement <i>per PJM website</i>	Responsible Customers - Schedule 12 Appendix				Estimated New Jersey EDC Zone Charges by Project				
			ACE Zone Share ¹	JCP&L Zone Share ¹	PSE&G Zone Share ¹	RE Zone Share ¹	ACE Zone Charges	JCP&L Zone Charges	PSE&G Zone Charges	RE Zone Charges	Total NJ Zones Charges
			<i>per PJM Open Access Transmission Tariff</i>								
Install 100 MVAR capacitor at Johnstown 230 kV substation	b0555	\$ 153,191.13	8.64%	18.30%	26.32%	0.98%	\$13,236	\$28,034	\$40,320	\$1,501	\$83,091
Install 300 MVAR capacitor at Conemaugh 500 kV substation	b0376	\$ -	1.66%	3.74%	6.26%	0.26%	\$0	\$0	\$0	\$0	\$0
							\$3,001,463	\$6,345,377	\$9,688,921	\$397,468	\$19,433,228

Notes on calculations >>>

= (a) * (b) = (a) * (c) = (a) * (d) = (a) * (e) = (f) + (g) + (h) + (i)

	(k)	(l)	(m)	(n)	(o)	(p)
Zonal Cost Allocation for New Jersey Zones	Average Monthly Impact on Zone Customers in 18/19	2018TX Peak Load per PJM website	Rate in \$/MW-mo.	2018 Impact (7 months)	2019 Impact (5 months)	2018-2019 Impact (12 months)
PSE&G	\$ 807,410.08	9,566.9	\$ 84.40	\$ 5,651,871	\$ 4,037,050	\$ 9,688,921
JCP&L	\$ 528,781.40	5,721.0	\$ 92.43	\$ 3,701,470	\$ 2,643,907	\$ 6,345,377
ACE	\$ 250,121.88	2,540.8	\$ 98.44	\$ 1,750,853	\$ 1,250,609	\$ 3,001,463
RE	\$ 33,122.33	401.7	\$ 82.46	\$ 231,856	\$ 165,612	\$ 397,468
Total Impact on NJ Zones	\$ 1,619,435.69			\$ 11,336,050	\$ 8,097,178	\$ 19,433,228

Notes on calculations >>>

= (k) * (l) = (k) * 7 = (k) * 5 = (n) * (o)

Notes:

1) 2018 allocation share percentages are from PJM OATT

SCHEDULE 12 – APPENDIX

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0216 Install -100/+525 MVAR dynamic reactive device at Black Oak	As specified under the procedures detailed in Attachment H-18B, Section 1.b	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0218 Install third Wylie Ridge 500/345kV transformer	As specified under the procedures detailed in Attachment H-18B, Section 1.b	AEC (11.83%) / DPL (19.40%) / Dominion (13.81%) / JCPL (15.56%) / PECO (39.40%)
b0220 Upgrade coolers on Wylie Ridge 500/345 kV #7		AEC (11.83%) / DPL (19.40%) / Dominion (13.81%) / JCPL (15.56%) / PECO (39.40%)
b0229 Install fourth Bedington 500/138 kV		APS (50.98%) / BGE (13.42%) / DPL (2.03%) / Dominion (14.50%) / ME (1.43%) / PEPCO (17.64%)
b0230 Install fourth Meadowbrook 500/138 kV	As specified under the procedures detailed in Attachment H-18B, Section 1.b	APS (79.16%) / BGE (3.61%) / DPL (0.86%) / Dominion (11.75%) / ME (0.67%) / PEPCO (3.95%)

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

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

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

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0328.2 Build new Meadow Brook – Loudoun 500 kV circuit (20 of 50 miles)	As specified under the procedures detailed in Attachment H-18B, Section 1.b	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0343 Replace Doubs 500/230 kV transformer #2	As specified under the procedures detailed in Attachment H-18B, Section 1.b	AEC (1.85%) / BGE (21.49%) / DPL (3.91%) / Dominion (28.86%) / ME (2.97%) / PECO (5.73%) / PEPCO (35.19%)
b0344 Replace Doubs 500/230 kV transformer #3	As specified under the procedures detailed in Attachment H-18B, Section 1.b	AEC (1.86%) / BGE (21.50%) / DPL (3.91%) / Dominion (28.82%) / ME (2.97%) / PECO (5.74%) / PEPCO (35.20%)
b0345 Replace Doubs 500/230 kV transformer #4	As specified under the procedures detailed in Attachment H-18B, Section 1.b	AEC (1.85%) / BGE (21.49%) / DPL (3.90%) / Dominion (28.83%) / ME (2.98%) / PECO (5.75%) / PEPCO (35.20%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.1 Build new Mt. Storm – 502 Junction 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.2 Build new Mt. Storm – Meadow Brook 500 kV circuit	As specified under the procedures detailed in Attachment H-18B, Section 1.b	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.3 Build new 502 Junction 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.4 Upgrade Meadow Brook 500 kV substation	As specified under the procedures detailed in Attachment H-18B, Section 1.b	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.5	Replace Harrison 500 kV breaker HL-3	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.6	Upgrade (per ABB inspection) breaker HL-6	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.7	Upgrade (per ABB inspection) breaker HL-7	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.8	Upgrade (per ABB inspection) breaker HL-8	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.9	Upgrade (per ABB inspection) breaker HL-10	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.10	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-1	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.11	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-3	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.12	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-4	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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**East Coast Power, L.L.C

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.13	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-6	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.14	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-7	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.15	Upgrade (per ABB Inspection) Hatfield 500 kV breakers HFL-9	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.16	Upgrade (per ABB inspection) Harrison 500 kV breaker 'HL-3'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

*Neptune Regional Transmission System, LLC

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.17	Replace Meadow Brook 138 kV breaker 'MD-10'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.18	Replace Meadow Brook 138 kV breaker 'MD-11'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

*Neptune Regional Transmission System, LLC

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.19	Replace Meadow Brook 138 kV breaker 'MD-12'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.20	Replace Meadow Brook 138 kV breaker 'MD-13'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.21	Replace Meadow Brook 138 kV breaker 'MD-14'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.22	Replace Meadow Brook 138 kV breaker 'MD-15'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.23	Replace Meadow Brook 138 kV breaker 'MD-16'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.24	Replace Meadow Brook 138 kV breaker 'MD-17'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

*Neptune Regional Transmission System, LLC

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.25	Replace Meadow Brook 138 kV breaker 'MD-18'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.26	Replace Meadow Brook 138 kV breaker 'MD-22#1 CAP'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.27	Replace Meadow Brook 138 kV breaker 'MD-4'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.28	Replace Meadow Brook 138 kV breaker 'MD-5'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.29	Replace Meadowbrook 138 kV breaker 'MD-6'	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.30	Replace Meadowbrook 138 kV breaker ‘MD-7’	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.31	Replace Meadowbrook 138 kV breaker ‘MD-8’	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0347.32	Replace Meadowbrook 138 kV breaker ‘MD-9’	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0347.33	Replace Meadow Brook 138kV breaker ‘MD-1’	APS (100%)
b0347.34	Replace Meadow Brook 138kV breaker ‘MD-2’	APS (100%)
b0348	Upgrade Stonewall – Inwood 138 kV with 954 ACSR conductor	APS (100%)
b0373	Convert Doubs – Monocacy 138 kV facilities to 230 kV operation	AEC (1.82%) / APS (76.84%) / DPL (2.64%) / JCPL (4.53%) / ME (9.15%) / Neptune* (0.42%) / PPL (4.60%)
b0393	Replace terminal equipment at Harrison 500 kV and Belmont 500 kV	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

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

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

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0418	Install a breaker failure auto-restoration scheme at Cabot 500 kV for the failure of the #6 breaker	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0419	Install a breaker failure auto-restoration scheme at Bedington 500 kV for the failure of the #1 and #2 breakers	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0420	Operating Procedure to open the Black Oak 500/138 kV transformer #3 for the loss of Hatfield – Ronco 500 kV and the Hatfield #3 Generation	APS (100%)
b0445	Upgrade substation equipment and reconductor the Tidd – Mahans Lane – Weirton 138kV circuit with 954 ACSR	APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0460	Raise limiting structures on Albright – Bethelboro 138 kV to raise the rating to 175 MVA normal 214 MVA emergency	APS (100%)
b0491	Construct an Amos to Welton Spring to WV state line 765 kV circuit (APS equipment)	As specified under the procedures detailed in Attachment H-19B
b0492	Construct a Welton Spring to Kemptown 765 kV line (APS equipment)	As specified under the procedures detailed in Attachment H-19B
b0492.3	Replace Eastalco 230 kV breaker D-26	APS (100%)
b0492.4	Replace Eastalco 230 kV breaker D-28	APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0492.5	Replace Eastalco 230 kV breaker D-31	APS (100%)
b0495	Replace existing Kammer 765/500 kV transformer with a new larger transformer	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0533	Reconductor the Powell Mountain – Sutton 138 kV line	APS (100%)
b0534	Install a 28.61 MVAR capacitor on Sutton 138 kV	APS (100%)
b0535	Install a 44 MVAR capacitor on Dutch Fork 138 kV	APS (100%)
b0536	Replace Doubs circuit breaker DJ1	APS (100%)
b0537	Replace Doubs circuit breaker DJ7	APS (100%)
b0538	Replace Doubs circuit breaker DJ10	APS (100%)
b0572.1	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0572.2	Reconductor Albright – Mettiki – Williams – Parsons – Loughs Lane 138 kV with 954 ACSR	APS (100%)
b0573	Reconfigure circuits in Butler – Cabot 138 kV area	APS (100%)
b0577	Replace Fort Martin 500 kV breaker FL-1	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0584	Install 33 MVAR 138 kV capacitor at Necessity 138 kV	APS (100%)
b0585	Increase Cecil 138 kV capacitor size to 44 MVAR, replace five 138 kV breakers at Cecil due to increased short circuit fault duty as a result of the addition of the Prexy substation	APS (100%)
b0586	Increase Whiteley 138 kV capacitor size to 44 MVAR	APS (100%)

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

b0587	Reconductor AP portion of Tidd – Carnegie 138 kV and Carnegie – Weirton 138 kV with 954 ACSR		APS (100%)
b0588	Install a 40.8 MVAR 138 kV capacitor at Grassy Falls		APS (100%)
b0589	Replace five 138 kV breakers at Cecil		APS (100%)
b0590	Replace #1 and #2 breakers at Charleroi 138 kV		APS (100%)
b0591	Install a 25.2 MVAR capacitor at Seneca Caverns 138 kV		APS (100%)
b0673	Rebuild Elko – Carbon Center Junction using 230 kV construction		APS (100%)
b0674	Construct new Osage – Whiteley 138 kV circuit		APS (97.68%) / DL (0.96%) / PENELEC (1.09%) / ECP** (0.01%) / PSEG (0.25%) / RE (0.01%)
b0674.1	Replace the Osage 138 kV breaker ‘CollinsF126’		APS (100%)
b0675.1	Convert Monocacy - Walkersville 138 kV to 230 kV		AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0675.2	Convert Walkersville - Catoctin 138 kV to 230 kV		AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)

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

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0675.9	Convert Walkersville Substation from 138 kV to 230 kV	AEC (1.02%) / APS (81.96%) / DPL (0.85%) / JCPL (1.75%) / ME (6.37%) / NEPTUNE* (0.15%) / PECO (3.09%) / PPL (2.24%) / PSEG (2.42%) / RE (0.09%) / ECP** (0.06%)
b0676.1	Reconductor Doubs - Lime Kiln (#207) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0676.2	Reconductor Doubs - Lime Kiln (#231) 230kV	AEC (0.64%) / APS (86.70%) / DPL (0.53%) / JCPL (1.93%) / ME (4.04%) / NEPTUNE* (0.18%) / PECO (1.93%) / PENELEC (0.93%) / PSEG (2.92%) / RE (0.12%) / ECP** (0.08%)
b0677	Reconductor Double Toll Gate – Riverton with 954 ACSR	APS (100%)
b0678	Reconductor Glen Falls - Oak Mound 138kV with 954 ACSR	APS (100%)
b0679	Reconductor Grand Point – Letterkenny with 954 ACSR	APS (100%)
b0680	Reconductor Greene – Letterkenny with 954 ACSR	APS (100%)
b0681	Replace 600/5 CT's at Franklin 138 kV	APS (100%)
b0682	Replace 600/5 CT's at Whiteley 138 kV	APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0684	Reconductor Guilford – South Chambersburg with 954 ACSR	APS (100%)
b0685	Replace Ringgold 230/138 kV #3 with larger transformer	APS (71.93%) / JCPL (4.17%) / ME (6.79%) / NEPTUNE* (0.38%) / PECO (4.05%) / PENELEC (5.88%) / ECP** (0.18%) / PSEG (6.37%) / RE (0.25%)
b0704	Install a third Cabot 500/138 kV transformer	APS (74.36%) / DL (2.73%) PENELEC (22.91%)
b0797	Advance n0321 (Replace Doubs Circuit Breaker DJ2)	APS(100%)
b0798	Advance n0322 (Replace Doubs Circuit Breaker DJ3)	APS(100%)
b0799	Advance n0323 (Replace Doubs Circuit Breaker DJ6)	APS(100%)
b0800	Advance n0327 (Replace Doubs Circuit Breaker DJ16)	APS(100%)
b0941	Replace Opequon 138 kV breaker 'BUSTIE'	APS(100%)
b0942	Replace Butler 138 kV breaker '#1 BANK'	APS(100%)
b0943	Replace Butler 138 kV breaker '#2 BANK'	APS(100%)
b0944	Replace Yukon 138 kV breaker 'Y-8'	APS(100%)
b0945	Replace Yukon 138 kV breaker 'Y-3'	APS(100%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0946	Replace Yukon 138 kV breaker 'Y-1'	APS(100%)
b0947	Replace Yukon 138 kV breaker 'Y-5'	APS(100%)
b0948	Replace Yukon 138 kV breaker 'Y-2'	APS(100%)
b0949	Replace Yukon 138 kV breaker 'Y-19'	APS(100%)
b0950	Replace Yukon 138 kV breaker 'Y-4'	APS(100%)
b0951	Replace Yukon 138 kV breaker 'Y-9'	APS(100%)
b0952	Replace Yukon 138 kV breaker 'Y-11'	APS(100%)
b0953	Replace Yukon 138 kV breaker 'Y-13'	APS(100%)
b0954	Replace Charleroi 138 kV breaker '#1 XFMR BANK'	APS(100%)
b0955	Replace Yukon 138 kV breaker 'Y-7'	APS(100%)
b0956	Replace Pruntytown 138 kV breaker 'P-9'	APS(100%)
b0957	Replace Pruntytown 138 kV breaker 'P-12'	APS(100%)
b0958	Replace Pruntytown 138 kV breaker 'P-15'	APS(100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0959 Replace Charleroi 138 kV breaker '#2 XFMR BANK'		APS(100%)
b0960 Replace Pruntytown 138 kV breaker 'P-2'		APS(100%)
b0961 Replace Pruntytown 138 kV breaker 'P-5'		APS(100%)
b0962 Replace Yukon 138 kV breaker 'Y-18'		APS(100%)
b0963 Replace Yukon 138 kV breaker 'Y-10'		APS(100%)
b0964 Replace Pruntytown 138 kV breaker 'P-11'		APS(100%)
b0965 Replace Springdale 138 kV breaker '138E'		APS(100%)
b0966 Replace Pruntytown 138 kV breaker 'P-8'		APS(100%)
b0967 Replace Pruntytown 138 kV breaker 'P-14'		APS(100%)
b0968 Replace Ringgold 138 kV breaker '#3 XFMR BANK'		APS(100%)
b0969 Replace Springdale 138 kV breaker '138C'		APS(100%)
b0970 Replace Rivesville 138 kV breaker '#8 XFMR BANK'		APS(100%)
b0971 Replace Springdale 138 kV breaker '138F'		APS(100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0972	Replace Belmont 138 kV breaker 'B-16'	APS(100%)
b0973	Replace Springdale 138 kV breaker '138G'	APS(100%)
b0974	Replace Springdale 138 kV breaker '138V'	APS(100%)
b0975	Replace Armstrong 138 kV breaker 'BROOKVILLE'	APS(100%)
b0976	Replace Springdale 138 kV breaker '138P'	APS(100%)
b0977	Replace Belmont 138 kV breaker 'B-17'	APS(100%)
b0978	Replace Springdale 138 kV breaker '138U'	APS(100%)
b0979	Replace Springdale 138 kV breaker '138D'	APS(100%)
b0980	Replace Springdale 138 kV breaker '138R'	APS(100%)
b0981	Replace Yukon 138 kV breaker 'Y-12'	APS(100%)
b0982	Replace Yukon 138 kV breaker 'Y-17'	APS(100%)
b0983	Replace Yukon 138 kV breaker 'Y-14'	APS(100%)
b0984	Replace Rivesville 138 kV breaker '#10 XFMR BANK'	APS(100%)
b0985	Replace Belmont 138 kV breaker 'B-14'	APS(100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0986	Replace Armstrong 138 kV breaker 'RESERVE BUS'	APS(100%)
b0987	Replace Yukon 138 kV breaker 'Y-16'	APS(100%)
b0988	Replace Springdale 138 kV breaker '138T'	APS(100%)
b0989	Replace Edgelawn 138 kV breaker 'GOFF RUN #632'	APS(100%)
b0990	Change reclosing on Cabot 138 kV breaker 'C-9'	APS(100%)
b0991	Change reclosing on Belmont 138 kV breaker 'B-7'	APS(100%)
b0992	Change reclosing on Belmont 138 kV breaker 'B-12'	APS(100%)
b0993	Change reclosing on Belmont 138 kV breaker 'B-9'	APS(100%)
b0994	Change reclosing on Belmont 138 kV breaker 'B-19'	APS(100%)
b0995	Change reclosing on Belmont 138 kV breaker 'B-21'	APS(100%)
b0996	Change reclosing on Willow Island 138 kV breaker 'FAIRVIEW #84'	APS(100%)
b0997	Change reclosing on Cabot 138 kV breaker 'C-4'	APS(100%)
b0998	Change reclosing on Cabot 138 kV breaker 'C-1'	APS(100%)

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

b0999	Replace Redbud 138 kV breaker 'BUS TIE'		APS(100%)
b1022.1	Reconfigure the Peters to Bethel Park 138 kV line and Elrama to Woodville 138 kV line to create a 138 kV path from Woodville to Peters and a 138 kV path from Elrama to Bethel Park		APS (96.98%) / DL (3.02%)
b1022.3	Add static capacitors at Smith 138 kV		APS (96.98%) / DL (3.02%)
b1022.4	Add static capacitors at North Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.5	Add static capacitors at South Fayette 138 kV		APS (96.98%) / DL (3.02%)
b1022.6	Add static capacitors at Manifold 138 kV		APS (96.98%) / DL (3.02%)
b1022.7	Add static capacitors at Houston 138 kV		APS (96.98%) / DL (3.02%)
b1023.1	Install a 500/138 kV transformer at 502 Junction		APS (100%)
b1023.2	Construct a new Franklin - 502 Junction 138 kV line including a rebuild of the Whiteley - Franklin 138 kV line to double circuit		APS (100%)
b1023.3	Construct a new 502 Junction - Osage 138 kV line		APS (100%)

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

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

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

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

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

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

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1164	Replace Cecil 138 kV breaker ‘Enlow OCB’	APS (100%)
b1165	Replace Cecil 138 kV breaker ‘South Fayette’	APS (100%)
b1166	Replace Wylie Ridge 138 kV breaker ‘W-9’	APS (100%)
b1167	Replace Reid 138 kV breaker ‘RI-2’	APS (100%)
b1171.1	Install the second Black Oak 500/138 kV transformer, two 138 kV breaker, and related substation work	BGE (20.76%) / DPL (3.14%) / Dominion (39.55%) / ME (2.71%) / PECO (3.36%) / PEPCO (30.48%)
b1171.3	Install six 500 kV breakers and remove BOL1 500 kV breaker at Black Oak	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b1200	Reconductor Double Toll Gate – Greenwood 138 kV with 954 ACSR conductor	APS (100%)
b1221.1	Convert Carbon Center from 138 kV to a 230 kV ring bus	APS (100%)
b1221.2	Construct Bear Run 230 kV substation with 230/138 kV transformer	APS (100%)

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***Hudson Transmission Partners, LLC

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

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1239	Install a 138 kV 44 MVAR capacitor at Ridgeway substation	APS (100%)
b1240	Install a 138 kV 44 MVAR capacitor at Elko Substation	APS (100%)
b1241	Upgrade terminal equipment at Washington substation on the GE Plastics/DuPont terminal	APS (100%)
b1242	Replace structures between Collins Ferry and West Run	APS (100%)
b1243	Install a 138 kV capacitor at Potter Substation	APS (100%)
b1261	Replace Butler 138 kV breaker '1-2 BUS 138'	APS (100%)
b1383	Install 2nd 500/138 kV transformer at 502 Junction	APS (93.27%) / DL (5.39%) / PENELEC (1.34%)
b1384	Reconductor approximately 2.17 miles of Bedington – Shepherdstown 138 kV with 954 ACSR	APS (100%)
b1385	Reconductor Halfway – Paramount 138 kV with 1033 ACCR	APS (100%)
b1386	Reconductor Double Tollgate – Meadow Brook 138 kV ckt 2 with 1033 ACCR	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1387	Reconductor Double Tollgate – Meadow Brook 138 kV	APS (93.33%) / BGE (3.39%) / PEPCO (3.28%)
b1388	Reconductor Feagans Mill – Millville 138 kV with 954 ACSR	APS (100%)

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

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

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1406	Change reclosing on Armstrong 138 kV breaker ‘KITTANNING’ to 1 shot at 15 seconds		APS (100%)
b1407	Change reclosing on Armstrong 138 kV breaker ‘BURMA’ to 1 shot at 15 seconds		APS (100%)
b1408	Replace the Weirton 138 kV breaker ‘Tidd 224’ with a 40 kA breaker		APS (100%)
b1409	Replace the Cabot 138 kV breaker ‘C9 Kiski Valley’ with a 40 kA breaker		APS (100%)
b1507.2	Terminal Equipment upgrade at Doubs substation		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1507.3	Mt. Storm – Doubs transmission line rebuild in Maryland – Total line mileage for APS is 2.71 miles	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b1510	Install 59.4 MVAR capacitor at Waverly	APS (100%)
b1672	Install a 230 kV breaker at Carbon Center	APS (100%)
b0539	Replace Doubs circuit breaker DJ11	APS (100%)
b0540	Replace Doubs circuit breaker DJ12	APS (100%)

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0541	Replace Doubs circuit breaker DJ13		APS (100%)
b0542	Replace Doubs circuit breaker DJ20		APS (100%)
b0543	Replace Doubs circuit breaker DJ21		APS (100%)
b0544	Remove instantaneous reclose from Eastalco circuit breaker D-26		APS (100%)
b0545	Remove instantaneous reclose from Eastalco circuit breaker D-28		APS (100%)
b0559	Install 200 MVAR capacitor at Meadow Brook 500 kV substation		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0560	Install 250 MVAR capacitor at Kemptown 500 kV substation		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1803	Build a 300 MVAR Switched Shunt at Doubs 500 kV and increase (~50 MVAR) in size the existing Switched Shunt at Doubs 500 kV	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b1804	Install a new 600 MVAR SVC at Meadowbrook 500kV	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b1816.1	Replace relaying at the Mt. Airy substation on the Carroll - Mt. Airy 230 kV line	APS (100%)

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1816.2	Adjust the control settings of all existing capacitors at Mt Airy 34.5kV, Monocacy 138kV, Ringgold 138kV served by Potomac Edison's Eastern 230 kV network to ensure that all units will be on during the identified N-1-1 contingencies	APS (100%)
b1816.3	Replace existing unidirectional LTC controller on the No. 4, 230/138 kV transformer at Carroll substation with a bidirectional unit	APS (100%)
b1816.4	Isolate and bypass the 138 kV reactor at Germantown Substation	APS (100%)
b1816.6	Replace 336.4 ACSR conductor on the Catoctin - Carroll 138 kV line using 556.5 ACSR (26/7) or equivalent on existing structures (12.7 miles), 800 A wave traps at Carroll and Catoctin with 1200 A units, and 556.5 ACSR SCCIR (Sub-conductor) line risers and bus traps with 795 ACSR or equivalent	APS (100%)

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

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

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

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

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

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

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

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1988	Raise structures between Lake Lynn and West Run to eliminate the clearance de-rates on the West Run – Lake Lynn 138 kV line	APS (100%)
b1989	Raise structures between Collins Ferry and West Run to eliminate the clearance de-rates on the Collins Ferry - West Run 138 kV line	APS (100%)
b2095	Replace Weirt 138 kV breaker 'S-TORONTO226' with 63kA rated breaker	APS (100%)
b2096	Revise the reclosing of Weirt 138 kV breaker '2&5 XFMR'	APS (100%)
b2097	Replace Ridgeley 138 kV breaker '#2 XFMR OCB'	APS (100%)
b2098	Revise the reclosing of Ridgeley 138 kV breaker 'AR3' with 40kA rated breaker	APS (100%)
b2099	Revise the reclosing of Ridgeley 138 kV breaker 'RC1'	APS (100%)
b2100	Replace Ridgeley 138 kV breaker 'WC4' with 40kA rated breaker	APS (100%)
b2101	Replace Ridgeley 138 kV breaker '1 XFMR OCB' with 40kA rated breaker	APS (100%)
b2102	Replace Armstrong 138 kV breaker 'GARETTRJCT' with 40kA rated breaker	APS (100%)

* Neptune Regional Transmission System, LLC

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

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

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

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2124.1	Add a new 138 kV line exit	APS (100%)
b2124.2	Construct a 138 kV ring bus and install a 138/69 kV autotransformer	APS (100%)
b2124.3	Add new 138 kV line exit and install a 138/25 kV transformer	APS (100%)
b2124.4	Construct approximately 5.5 miles of 138 kV line	APS (100%)
b2124.5	Convert approximately 7.5 miles of 69 kV to 138 kV	APS (100%)
b2156	Install a 75 MVAR 230 kV capacitor at Shingletown Substation	APS (100%)
b2165	Replace 800A wave trap at Stonewall with a 1200 A wave trap	APS (100%)
b2166	Reconductor the Millville – Sleepy Hollow 138kV 4.25 miles of 556 ACSR with 795 ACSR, upgrade line risers at Sleepy Hollow, and change 1200 A CT tap at Millville to 800	APS (100%)
b2168	For Grassy Falls 138kV Capacitor bank adjust turn-on voltage to 1.0pu with a high limit of 1.04pu, For Crupperneck and Powell Mountain 138kV Capacitor Banks adjust turn-on voltage to 1.01pu with a high limit of 1.035pu	APS (100%)

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

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

SCHEDULE 12 – APPENDIX A

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

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
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%)
b2120	Six-Wire Lake Lynn - Lardin 138 kV circuits	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%)
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%)
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, The Potomac Edison Company, and West Penn Power Company, all 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 138kV 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%)
b2341	Install 39.6 MVAR Capacitor at Shaffers Corner 138 kV Substation	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, The Potomac Edison Company, and West Penn Power Company, all doing business as Allegheny Power (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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%)
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, The Potomac Edison Company, and West Penn Power Company, all 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%)
b2440	Replace the Cabot 138kV breaker 'C9-KISKI VLY' with 63kA		APS (100%)
b2472	Replace the Ringgold 138 kV breaker 'RCM1' with 40kA breakers		APS (100%)
b2473	Replace the Ringgold 138 kV breaker '#4 XMFR' with 40kA 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) 138kV line		APS (100%)

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

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

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

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

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

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
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%)
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%)
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%)
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, The Potomac Edison Company, and West Penn Power Company, all 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%)
b2763	Replace the breaker risers and wave trap at Bredinville 138 kV substation on the Cabrey Junction 138 kV terminal	APS (100%)
b2764	Upgrade Fairview 138 kV breaker risers and disconnect leads; Replace 500 CU breaker risers and 556 ACSR disconnect leads with 795 ACSR	APS (100%)

Attachment 2B PJM Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for BG&E

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
Required Transmission Enhancement <i>per PJM website</i>	PJM Upgrade ID <i>per PJM spreadsheet</i>	June 2018 - May 2019 Annual Revenue Requirement <i>per PJM website</i>	Responsible Customers - Schedule 12 Appendix				Estimated New Jersey EDC Zone Charges by Project				
			ACE Zone Share ¹ <i>per PJM Open Access Transmission Tariff</i>	JCP&L Zone Share ¹	PSE&G Zone Share ¹	RE Zone Share ¹	ACE Zone Charges	JCP&L Zone Charges	PSE&G Zone Charges	RE Zone Charges	Total NJ Zones Charges
Install a second Conastone – Graceton 230 kV circuit	b0497	\$ 2,934,126	9.03%	9.67%	14.11%	0.52%	\$264,952	\$283,730	\$414,005	\$15,257	\$977,944
install new 500 kV transmission from Possum Point to Calvert Cliffs	b0512	\$ 1,687	1.66%	3.74%	6.26%	0.26%	\$28	\$63	\$106	\$4	\$201
		\$ -					\$0	\$0	\$0	\$0	\$0
Totals							\$264,980	\$283,793	\$414,111	\$15,262	\$978,145

Notes on calculations >>>

$$= (a) * (b) \quad = (a) * (c) \quad = (a) * (d) \quad = (a) * (e) \quad = (f) + (g) + (h) + (i)$$

	(k)	(l)	(m)	(n)	(o)	(p)
Zonal Cost Allocation for New Jersey Zones	Average Monthly Impact on Zone Customers in 18/19	2018TX Peak Load <i>per PJM website</i>	Rate in \$/MW-mo.	2018 Impact (7 months)	2019 Impact (5 months)	2018-2019 Impact (12 months)
PSE&G	\$ 34,509.23	9,566.9	\$ 3.61	\$ 241,565	\$ 172,546	\$ 414,111
JCP&L	\$ 23,649.42	5,721.0	\$ 4.13	\$ 165,546	\$ 118,247	\$ 283,793
ACE	\$ 22,081.63	2,540.8	\$ 8.69	\$ 154,571	\$ 110,408	\$ 264,980
RE	\$ 1,271.82	401.7	\$ 3.17	\$ 8,903	\$ 6,359	\$ 15,262
Total Impact on NJ Zones	\$ 81,512.11			\$ 570,585	\$ 407,561	\$ 978,145

Notes on calculations >>>

$$= (k) * (l) \quad = (k) * 7 \quad = (k) * 5 \quad = (n) * (o)$$

Notes:

1) 2018 allocation share percentages are from PJM OATT

SCHEDULE 12 – APPENDIX

(2) Baltimore Gas and Electric Company

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

* Neptune Regional Transmission System, LLC

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

Baltimore Gas and Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0497	Install a second Conastone – Graceton 230 kV circuit	AEC (9.00%) / DPL (16.85%) / JCPL (9.64%) / ME (1.48%) / Neptune* (0.95%) / PECO (30.79%) / PPL (16.41%) / ECP** (0.29%) / PSEG (14.07%) / RE (0.52%)
b0497.1	Replace Conastone 230 kV breaker #4	BGE (100%)
b0497.2	Replace Conastone 230 kV breaker #7	BGE (100%)
b0500.2	Replace wavetrap and raise operating temperature on Conastone – Otter Creek 230 kV line to 165 deg	AEC (6.27%) / DPL (8.65 %) / JCPL (14.54%) / ME (10.59%) / Neptune* (1.37%) / PECO (15.66%) / PPL (21.02%) / ECP** (0.57%) / PSEG (20.56%) / RE (0.77%)
b0512.33	MAPP Project Install new Hallowing Point – Calvert Cliffs 500 kV circuit and associated substation work at Calvert Cliffs substation	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (11.40%) / ComEd (6.13%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

Baltimore Gas and Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.43	MAPP Project Install new Hallowing Point – Calvert Cliffs 500 kV circuit and associated substation work at Calvert Cliffs substation	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (11.40%) / ComEd (6.13%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0729	Rebuild both Harford – Perryman 110615-A and 110616-A 115 kV circuits	BGE (100%)
b0749	Replace 230 kV breaker and associated CT's at Riverside 230 kV on 2345 line; replace all dead-end structures at Brandon Shores, Hawkins Point, Sollers Point and Riverside; Install a second conductor per phase on the spans entering each station	BGE (100%)

Baltimore Gas and Electric Company (cont.)

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

* Neptune Regional Transmission System, LLC

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

Baltimore Gas and Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0826 Remove line drop limitations at the substation terminations for Riverside – East Point 115 kV		BGE (100%)
b0827 Install an SPS for one year to trip a Mays Chapel 115 kV breaker one line 110579 for line overloads 110509		BGE (100%)
b0828 Disable the HS throwover at Harrisonville for one year		BGE (100%)
b0870 Rebuild each line (0.2 miles each) to increase the normal rating to 968 MVA and the emergency rating to 1227 MVA		BGE (100%)
b0906 Increase contact parting time on Wagner 115 kV breaker 32-3/2		BGE (100%)
b0907 Increase contact parting time on Wagner 115 kV breaker 34-1/3		BGE (100%)
b1016 Rebuild Graceton - Bagley 230 kV as double circuit line using 1590 ACSR. Terminate new line at Graceton with a new circuit breaker.		APS (2.02%) / BGE (75.22%) / Dominion (16.1%) / PEPCO (6.6%)
b1055 Upgrade wire drops at Center 115kV on the Center - Westport 115 kV circuit		BGE (100%)
b1029 Upgrade wire sections at Wagner on both 110534 and 110535 115 kV circuits. Reconfigure Lipins Corner substation		BGE (100%)

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

Baltimore Gas and Electric Company (cont.)

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

Baltimore Gas and Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1176	Transfer 6 MW of load from Mt. Washington – East Towson	BGE (100%)
b1251	Build a second Raphael – Bagley 230 kV	APS (4.42%) / BGE (66.95%) / ComEd (4.12%) / Dayton (0.49%) / Dominion (18.76%) / PENELEC (0.05%) / PEPCO (5.21%)
b1251.1	Re-build the existing Raphael – Bagley 230 kV	APS (4.42%) / BGE (66.95%) / ComEd (4.12%) / Dayton (0.49%) / Dominion (18.76%) / PENELEC (0.05%) / PEPCO (5.21%)
b1252	Upgrade terminal equipment (remove terminal limitation at Pumphrey Tap to bring the circuit to 790N/941E	BGE (100%)

Baltimore Gas and Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1253	Replace the existing Northeast 230/115 kV transformer #3 with 500 MVA	BGE (100%)
b1253.1	Replace the Northeast 230 kV breaker '2317/315'	BGE (100%)
b1253.2	Revise reclosing on Windy Edge 115 kV breaker '110515'	BGE (100%)
b1253.3	Revise reclosing on Windy Edge 115 kV breaker '110516'	BGE (100%)
b1253.4	Revise reclosing on Windy Edge 115 kV breaker '110517'	BGE (100%)
b1254	Build a new 500/230 kV substation (Emory Grove)	APS (4.07%) / BGE (53.19%) / ComEd (3.71%) / Dayton (0.50%) / Dominion (16.44%) / PENELEC (0.59%) / PEPCO (21.50%)
b1254.1	Bundle the Emory – North West 230 kV circuits	BGE (100%)
b1267	Rebuild existing Erdman 115 kV substation to a dual ring-bus configuration to enable termination of new circuits	BGE (100%)
b1267.1	Construct 115 kV double circuit underground line from existing Coldspring to Erdman substation	BGE (100%)
b1267.2	Replace Mays Chapel 115 kV breaker '110515A'	BGE (100%)
b1267.3	Replace Mays Chapel 115 kV breaker '110579C'	BGE (100%)

Baltimore Gas and Electric Company (cont.)

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

SCHEDULE 12 – APPENDIX A

(2) Baltimore Gas and Electric Company

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

Baltimore Gas and Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2396.1	Install a tie breaker at Mays Chapel 115 kV substation	BGE (100%)
b2567	Upgrade the Riverside 115kV substation strain bus conductors on circuits 115012 and 115011 with double bundled 1272 ACSR to achieve ratings of 491/577 MVA SN/SE on both transformer leads	BGE (100%)
b2568	Reconductor Northwest – Northwest #2 115kV 110574 substation tie circuit with 2167 ACSR to achieve ratings of 400/462 MVA SN/SE	BGE (100%)
b2752.6	Conastone 230 kV substation tie-in work (install a new circuit breaker at Conastone 230 kV and upgrade any required terminal equipment to terminate the new 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%)
b2752.7	Reconductor/Rebuild the two Conastone – Northwest 230 kV lines 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%)
b2752.8	<i>Replace the Conastone 230 kV '2322 B5' breaker with a 63kA breaker</i>	<i>BGE (100%)</i>

Baltimore Gas and Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2752.9	Replace the Conastone 230 kV '2322 B6' breaker with a 63kA breaker	BGE (100%)
b2766.1	Upgrade substation equipment at Conastone 500 kV to increase facility rating to 2826 MVA normal and 3525 MVA emergency	<p>Load-Ratio Share Allocation: AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p>DFAX Allocation: AEC (0.05%) / APS (11.40%) / BGE (22.83%) / Dayton (2.23%) / DEOK (4.28%) / DPL (0.20%) / EKPC (1.98%) / JCPL (11.06%) / NEPTUNE* (1.17%) / POSEIDON**** (0.64%) / PENELEC (0.06%) / PEPCO (19.38%) / PSEG (23.77%) / RECO (0.95%)</p>

*Neptune Regional Transmission System, LLC

****Poseidon Transmission 1, LLC

Baltimore Gas and Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2816	Re-connect the Crane – Windy Edge 110591 & 110592 115 kV circuits into the Northeast Substation with the addition of a new 115 kV 3-breaker bay	BGE (100%)

Attachment 2C PJM Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for PPL Projects

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
Required Transmission Enhancement <i>per PJM website</i>	PJM Upgrade ID <i>per PJM spreadsheet</i>	June 2018- May 2019 Annual Revenue Requirement <i>per PJM website</i>	Responsible Customers - Schedule 12 Appendix				Estimated New Jersey EDC Zone Charges by Project				
			ACE Zone Share ¹	JCP&L Zone Share ¹	PSE&G Zone Share ¹	RE Zone Share ¹	ACE Zone Charges	JCP&L Zone Charges	PSE&G Zone Charges	RE Zone Charges	Total NJ Zones Charges
<i>per PJM Open Access Transmission Tariff</i>											
New 500 KV Susquehana- Roseland Line	b0487	\$ 73,470,886.00	1.66%	3.74%	6.26%	0.26%	\$1,219,617	\$2,747,811	\$4,599,277	\$191,024	\$8,757,730
Replace wave trap at Alburtus 500 kV Sub	b0171.2	\$ 8,381.00	1.66%	3.74%	6.26%	0.26%	\$139	\$313	\$525	\$22	\$999
Replace wavetraps at Hosensack 500KV Sub	b0172.1	\$ 6,010.00	1.66%	3.74%	6.26%	0.26%	\$100	\$225	\$376	\$16	\$716
Replace wavetraps at Juniata 500KV Sub	b0284.2	\$ 12,153.00	1.66%	3.74%	6.26%	0.26%	\$202	\$455	\$761	\$32	\$1,449
New S-R additions < 500kV ²	b0487.1	\$ 1,756,533.00	0.00%	0.00%	5.14%	0.19%	\$0	\$0	\$90,286	\$3,337	\$93,623
New substation and transformers Middletown	b0468	\$ 2,408,736.00	0.00%	4.56%	5.94%	0.22%	\$0	\$109,838	\$143,079	\$5,299	\$258,216
Install Lauschtown 500/230 kV Sub below 500kv portion	b2006	\$ 2,618,100.00	1.11%	9.68%	11.43%	0.45%	\$29,061	\$253,432	\$299,249	\$11,781	\$593,523
Install Lauschtown 500/230 kV Sub 500kv portion tie line	b2006.1	\$ 8,698,675.00	1.66%	3.74%	6.26%	0.26%	\$144,398	\$325,330	\$544,537	\$22,617	\$1,036,882
200 MVAR shunt reactor at Alburtis 500kv	b2237	\$ 2,286,532.50	1.66%	3.74%	6.26%	0.26%	\$37,956	\$85,516	\$143,137	\$5,945	\$272,555
Totals							\$1,431,473	\$3,522,921	\$5,821,227	\$240,073	\$11,015,693

Notes on calculations >>>

$$= (a) * (b) \quad = (a) * (c) \quad = (a) * (d) \quad = (a) * (e) \quad = (f) + (g) + (h) + (i)$$

	(k)	(l)	(m)	(n)	(o)	(p)
Zonal Cost Allocation for New Jersey Zones	Average Monthly Impact on Zone Customers in 18/19	2018 Peak Load <i>per PJM website</i>	Rate in \$/MW-mo.	2018 Impact (7 months)	2019 Impact (5 months)	2018-2019 Impact (12 months)
PSE&G	\$ 485,102.22	9,566.9	\$ 50.71	\$ 3,395,716	\$ 2,425,511	\$ 5,821,227
JCP&L	\$ 293,576.76	5,721.0	\$ 51.32	\$ 2,055,037	\$ 1,467,884	\$ 3,522,921
ACE	\$ 119,289.39	2,540.8	\$ 46.95	\$ 835,026	\$ 596,447	\$ 1,431,473
RE	\$ 20,006.08	401.7	\$ 49.80	\$ 140,043	\$ 100,030	\$ 240,073
Total Impact on NJ Zones	\$ 917,974.45			\$ 6,425,821	\$ 4,589,872	\$ 11,015,693

Notes on calculations >>>

$$= (k) * (l) \quad = (k) * 7 \quad = (k) * 5 \quad = (n) * (o)$$

Notes:

1) 2018 allocation share percentages are from PJM OATT

SCHEDULE 12 – APPENDIX

(9) PPL Electric Utilities Corporation

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0074	Rebuild 12 miles of S. Akron – Berks 230 kV to double circuit, looping Met Ed’s S. Lebanon – S. Reading line into Berks; replacement of S. Reading 230 kV breaker 107252		PPL (100%)
b0171.2	Replace wavetrapp at Hosensack 500kV substation to increase rating of Elroy - Hosensack 500 kV		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0172.1	Replace wave trap at Alburdis 500kV substation		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

* Neptune Regional Transmission System, LLC

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

*** Hudson Transmission Partners, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0284.2	Replace two wave traps at Juniata 500 kV – on the two Juniata – Airydale 500 kV	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0284.4	Changes at Juniata 500 kV substation	PPL (100%)
b0293.1	Replace wavetrap at the Martins Creek 230 kV bus	PPL (100%)
b0293.2	Raise the operating temperature of the 2-1590 ACSR to 140C for the Martins Creek – Portland 230 kV circuit	PPL (100%)
b0440	Spare Juniata 500/230 kV transformer	PPL (100%)
b0468	Build a new substation with two 150 MVA transformers between Dauphin and Hummelstown 230/69 kV substations by sectionalizing the Middletown Junction – New Lebanon 230 kV line	JCPL (4.55%) / Neptune* (0.37%) / PECO (1.79%) / PENELEC (0.33%) / PPL (86.63%) / ECP** (0.18%) / PSEG (5.93%) / RE (0.22%)

* 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)
b0469	Install 130 MVAR capacitor at West Shore 230 kV line	PPL (100%)
b0487	Build new 500 kV transmission facilities from Susquehanna to Pennsylvania – New Jersey border at Bushkill	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0487.1	Install Lackawanna 500/230 kV transformer and upgrade 230 kV substation and switchyard	PENELEC (16.90%) / PPL (77.59%) / ECP** (0.19%) / PSEG (5.13%) / RE (0.19%)
b0500.1	Conastone – Otter Creek 230 kV – Reconductor approximately 17.2 miles of 795 kmil ACSR with new 795 kmil ACSS operated at 160 deg C	AEC (6.27%) / DPL (8.65%) / JCPL (14.54%) / ME (10.59%) / Neptune* (1.37%) / PECO (15.66%) / PPL (21.02%) / ECP** (0.57%) / PSEG (20.56%) / RE (0.77%)

*Neptune Regional Transmission System, LLC

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

*** Hudson Transmission Partners, LLC

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

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0558	Install 250 MVAR capacitor at Juniata 500 kV substation	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0593	Eldred – Pine Grove 69 kV line Rebuild Part 2: 8 miles	PPL (100%)
b0595	Rebuild Lackawanna – Edella 69 kV line to double circuit	PPL (100%)
b0596	Reconductor and rebuild Stanton – Providence 69 kV #1 and #2 lines with 69 kV design; approximately 8 miles total	PPL (100%)
b0597	Reconductor Suburban – Providence 69 kV #1 and resectionalize the Suburban 69 kV lines	PPL (100%)
b0598	Reconductor Suburban Taps #1 and #2 for 69 kV line portions	PPL (100%)

* Neptune Regional Transmission System, LLC

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

*** Hudson Transmission Partners, LLC

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0600 Tripp Park Substation: 69 kV tap off Stanton – Providence 69 kV line #3 to new substation		PPL (100%)
b0601 Jessup Substation: New 138/69 kV tap off of Peckville – Jackson 138/69 kV line		PPL (100%)
b0604 Add 150 MVA, 230/138/69 transformer #6 to Harwood substation		PPL (100%)
b0605 Reconductor Stanton – Old Forge 69 kV line and resectionalize the Jenkins – Scranton 69 kV #1 and #2 lines		PPL (100%)
b0606 New 138 kV tap off Monroe – Jackson 138 kV #1 line to Bartonsville substation		PPL (100%)
b0607 New 138 kV taps off Monroe – Jackson 138 kV lines to Stroudsburg substation		PPL (100%)
b0608 New 138 kV tap off Siegfried – Jackson 138 kV #2 to transformer #2 at Gilbert substation		PPL (100%)
b0610 At South Farmersville substation, a new 69 kV tap off Nazareth – Quarry #2 to transformer #2		PPL (100%)
b0612 Rebuild Siegfried – North Bethlehem portion (6.7 miles) of Siegfried – Quarry 69 kV line		PPL (100%)
b0613 East Tannersville Substation: New 138 kV tap to new substation		PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0614	Elroy substation expansion and new Elroy – Hatfield 138/69 kV double circuit lines (1.9 miles)		PPL (100%)
b0615	Reconductor and rebuild 12 miles of Seidersville – Quakerstown 138/69 kV and a new 75 MVA, 230/69 kV transformer #4		PPL (100%)
b0616	New Springfield 230/69 kV substation and transmission line connections		PPL (100%)
b0620	New 138 kV line and terminal at Monroe 230/138 substation		PPL (100%)
b0621	New 138 kV line and terminal at Siegfried 230/138 kV substation and add a second circuit to Siegfried – Jackson for 8.0 miles		PPL (100%)
b0622	138 kV yard upgrades and transmission line rearrangements at Jackson 138/69 kV substation		PPL (100%)
b0623	New West Shore – Whitehill Taps 138/69 kV double circuit line (1.3 miles)		PPL (100%)
b0624	Reconductor Cumberland – Wertzville 69 kV portion (3.7 miles) of Cumberland – West Shore 69 kV line		PPL (100%)
b0625	Reconductor Mt. Allen – Rossmoyne 69 kV portions (1.6 miles) of West Shore – Cumberland #3 and #4 lines		PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0627 Replace UG cable from Walnut substation to Center City Harrisburg substation for higher ampacity (0.25 miles)		PPL (100%)
b0629 Lincoln substation: 69 kV tap to convert to modified Twin A		PPL (100%)
b0630 W. Hempfield – Donegal 69 kV line: Reconductor / rebuild from Landisville Tap – Mt. Joy (2 miles)		PPL (100%)
b0631 W. Hempfield – Donegal 69 kV line: Reconductor / rebuild to double circuit from Mt. Joy – Donegal (2 miles)		PPL (100%)
b0632 Terminate new S. Manheim – Donegal 69 kV circuit into S. Manheim 69 kV #3		PPL (100%)
b0634 Rebuild S. Manheim – Fuller 69 kV portion (1.0 mile) of S. Manheim – West Hempfield 69 kV #3 line into a 69 kV double circuit		PPL (100%)
b0635 Reconductor Fuller Tap – Landisville 69 kV (4.1 miles) into a 69 kV double circuit		PPL (100%)
b0703 Berks substation modification on Berks – South Akron 230 kV line. Modification will isolate the line fault on the South Akron line and will allow Berks transformer #2 to be energized by the South Lebanon 230 kV circuit		PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0705	New Derry – Millville 69 kV line	PPL (100%)
b0707	Construct Bohemia – Twin Lakes 69 kV line, install a 10.9 MVAR capacitor bank near Bohemia 69 kV substation	PPL (100%)
b0708	New 69 kV double circuit from Jackson – Lake Naomi Tap	PPL (100%)
b0709	Install new 69 kV double circuit from Carlisle – West Carlisle	PPL (100%)
b0710	Install a third 69 kV line from Reese’s Tap to Hershey substation	PPL (100%)
b0711	New 69 kV that taps West Shore – Cumberland 69 kV #1 to Whitehill 69 kV substation	PPL (100%)
b0712	Construct a new 69 kV line between Strassburg Tap and the Millwood – Engleside 69 kV #1 line	PPL (100%)
b0713	Construct a new 138 kV double circuit line between Dillersville Tap and the West Hempfield – Prince 138 kV line	PPL (100%)
b0714	Prepare Roseville Tap for 138 kV conversion	PPL (100%)
b0715	Transfer S. Akron – S. Manheim #1 and #2 lines from the S. Akron 69 kV Yard to the S. Akron 138 kV Yard; Install switches on S. Akron – S. Manheim 138 kV #1 and #2 lines	PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required	Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0716	Add a second 69 kV line from Morgantown – Twin Valley		PPL (100%)
b0717	Rebuild existing Brunner Island – West Shore 230 kV line and add a second Brunner Island – West Shore 230 kV line		PPL (100%)
b0718	SPS scheme to drop 190 MVA of 69 kV radial load at West Shore and 56 MVA of 69 kV radial load at Cumberland		PPL (100%)
b0719	SPS scheme at Jenkins substation to open the Stanton #1 and Stanton #2 230 kV circuit breakers after the second contingency		PPL (100%)
b0791	Add a fourth 230/69 kV transformer at Stanton		PENELEC (9.55%) / PPL (90.45%)
b1074	Install motor operators on the Jenkins 230 kV ‘2W’ disconnect switch and build out Jenkins Bay 3 and have MOD ‘3W’ operated as normally open		PPL (100%)
b0881	Install motor operators on Susquehanna T21 - Susquehanna 230 kV line East CB at Susquehanna 230 kV switching station		PPL (100%)
b0908	Install motor operators at South Akron 230 kV		PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0909	Convert Jenkins 230 kV yard into a 3-breaker ring bus		PPL (100%)
b0910	Install a second 230 kV line between Jenkins and Stanton		PPL (100%)
b0911	Install motor operators at Frackville 230 kV		PPL (100%)
b0912	Install 2, 10.8 MVAR capacitor banks at Scranton 69 kV		PPL (100%)
b0913	Extend Cando Tap to the Harwood-Jenkins #2 69 kV line		PPL (100%)
b0914	Build a 3rd 69 kV line from Harwood to Valmont Taps		PPL (100%)
b0915	Replace Walnut-Center City 69 kV cable		PPL (100%)
b0916	Reconductor Sunbury-Dalmatia 69 kV line		PPL (100%)
b1021	Install a new (#4) 138/69 kV transformer at Wescosville		PPL (100%)
b1196	Remove the Siegfried bus tie breaker and install a new breaker on the Martins Creek 230 kV line west bay to maintain two ties between the 230 kV buses		PPL (100%)
b1201	Rebuild the Hercules Tap to Double Circuit 69 kV		PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1202 Mack-Macungie Double Tap, Single Feed Arrangement		PPL (100%)
b1203 Add the 2nd Circuit to the East Palmerton-Wagners-Lake Naomi 138/69 kV Tap		PPL (100%)
b1204 New Breinigsville 230-69 kV Substation		PPL (100%)
b1205 Siegfried-East Palmerton #1 69 kV Line- Install new 69 kV LSAB, Sectionalize, and Transfer Treichlers Substation		PPL (100%)
b1206 Siegfried-Quarry #1 & #2 69 kV Lines- Rebuild 3.3 mi from Quarry Substation to Macada Taps		PPL (100%)
b1209 Convert Neffsville Taps from 69 kV to 138 kV Operation		PPL (100%)
b1210 Convert Roseville Taps from 69 kV to 138 kV Operation (Part 1 – operate on the 69 kV system)		PPL (100%)
b1211 Convert Roseville Taps from 69 kV to 138 kV Operation (Part 2 – operate on the 138 kV system)		PPL (100%)
b1212 New 138 kV Taps to Flory Mill 138/69 kV Substation		PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1213 Convert East Petersburg Taps from 69 kV to 138 kV operation, install two 10.8 MVAR capacitor banks		PPL (100%)
b1214 Terminate South Manheim-Donegal #2 at South Manheim, Reduce South Manheim 69 kV Capacitor Bank, Resectionalize 69 kV		PPL (100%)
b1215 Reconductor and rebuild 16 miles of Peckville-Varden 69 kV line and 4 miles of Blooming Grove-Honesdale 69 kV line		PPL (100%)
b1216 Build approximately 2.5 miles of new 69 kV transmission line to provide a “double tap – single feed” connection to Kimbles 69/12 kV substation		PPL (100%)
b1217 Provide a “double tap – single feed” connection to Tafton 69/12 kV substation		PPL (100%)
b1524 Build a new Pocono 230/69 kV substation		PPL (100%)
b1524.1 Build approximately 14 miles new 230 kV South Pocono – North Pocono line		PPL (100%)
b1524.2 Install MOLSABs at Mt. Pocono substation		PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1525	Build new West Pocono 230/69 kV Substation	PPL (100%)
b1525.1	Build approximately 14 miles new 230 kV Jenkins-West Pocono 230 kV Line	PPL (100%)
b1525.2	Install Jenkins 3E 230 kV circuit breaker	PPL (100%)
b1526	Install a new Honeybrook – Twin Valley 69/138 kV tie	PPL (100%)
b1527	Construct a new 230/69 kV North Lancaster substation. The sub will be supplied from the SAKR-BERK 230kV Line	PPL (100%)
b1527.1	Construct new 69/138 kV transmission from North Lancaster 230/69 kV sub to Brecknock and Honeybrook areas	PPL (100%)
b1528	Install Motor-Operated switches on the Wescosville-Trexlerstown #1 & #2 69 kV lines at East Texas Substation	PPL (100%)
b1529	Add a double breaker 230 kV bay 3 at Hosensack	PPL (100%)
b1530	Replace Lock Haven 69kV ring bus with standard breaker and half design	PPL (100%)
b1532	Install new 32.4 MVAR capacitor bank at Sunbury	PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1533	Rebuild Lycoming-Lock Haven #1 and Lycoming-Lock Haven #2 69kV lines		PPL (100%)
b1534	Rebuild 1.4 miles of the Sunbury-Milton 69kV		PPL (100%)
b1601	Re-configure the Breinigsville 500 kV substation with addition two 500 kV circuit breakers		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)†
b1602	Re-configure the Elimsport 230 kV substation to breaker and half scheme and install 80 MVAR capacitor		PPL (100%)
b1740	Install a 90 MVAR cap bank on the Frackville 230 kV bus #207973		PPL (100%)
b1756	Install a 3rd West Shore 230/69 kV transformer		PPL (100%)
b1757	Install a 230 kV motor-operated air-break switch on the Clinton - Elimsport 230 kV line		PPL (100%)

* Neptune Regional Transmission System, LLC

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PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1758	Rebuild 1.65 miles of Columbia - Danville 69 kV line		PPL (100%)
b1759	Install a 69 kV 16.2 MVAR Cap at Milton substation		PPL (100%)
b1760	Install motor operated devices on the existing disconnect switches that are located on each side of all four 230 kV CBs at Stanton		PPL (100%)
b1761	Build a new Paupack - North 230 kV line (Approximately 21 miles)		PPL (100%)
b1762	Replace 3.7 miles of the existing 230 kV Blooming Grove - Peckville line by building 8.4 miles of new 230 kV circuit onto the Lackawanna - Hopatcong tower-line		PPL (100%)
b1763	Re-terminate the Peckville - Jackson and the Peckville - Varden 69 kV lines from Peckville into Lackawanna		PPL (100%)
b1764	Build a new 230-69 kV substations (Paupack)		PPL (100%)
b1765	Install a 16.2 MVAR capacitor bank at Bohemia 69-12 kV substation		PPL (100%)
b1766	Reconductor/rebuild 3.3 miles of the Siegfried - Quarry #1 and #2 lines		PPL (100%)
b1767	Install 6 motor-operated disconnect switches at Quarry substation		PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b1788	Install a new 500 kV circuit breaker at Wescosville		PPL (100%)
b1890	Add a second 230/69 kV transformer at North Pocono (NE/Pocono Reliability Project)		PPL (100%)
b1891	Build a new 230/138 kV Yard at Lackawanna (138 kV conversion from Lackawanna to Jenkins)		PPL (100%)
b1892	Rebuild the Throop Taps for 138 kV operation (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1893	Swap the Staton - Old Forge and Stanton - Brookside 69 kV circuits at Stanton (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1894	Rebuild and re-conductor 2.5 miles of the Stanton - Avoca 69 kV line		PPL (100%)
b1895	Rebuild and re-conductor 4.9 miles of the Stanton - Providence #1 69 kV line		PPL (100%)
b1896	Install a second 230/138 kV transformer and expand the 138 kV yard at Monroe		PPL (100%)
b1897	Build a new 230/138 kV substation at Jenkins (138 kV Conversion from Lackawanna to Jenkins)		PPL (100%)
b1898	Install a 69 kV Tie Line between Richfield and Dalmatia substations		PPL (100%)
b2004	Replace the CTs and switch in South Akron Bay 4 to increase the rating		PPL (100%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2005	Replace the CTs and switch in SAKR Bay 3 to increase the rating of the Millwood-South Akron 230 kV Line and of the rating in Bay 3	PPL (100%)
b2006	Install North Lancaster 500/230 kV substation (below 500 kV portion)	AEC (1.10%) / ECP** (0.37%) / HTP (0.37%) / JCPL (9.61%) / ME (19.42%) / Neptune* (0.75%) / PECO (6.01%) / PPL (50.57%) / PSEG (11.35%) / RE (0.45%)
b2006.1	Install North Lancaster 500/230 kV substation (500 kV portion)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b2007	Install a 90 MVAR capacitor bank at the Frackville 230 kV Substation	PPL (100%)
b2158	Install 10.8 MVAR capacitor at West Carlisle 69/12 kV substation	PPL (100%)

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SCHEDULE 12 – APPENDIX 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%)

PPL Electric Utilities Corporation (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2237	150 MVAR shunt reactor at Alburdis 500 kV	Load-Ratio Share Allocation: AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%) DFAX Allocation: PPL (100%)
b2238	100 MVAR shunt reactor at Elimspport 230 kV	PPL (100%)

* Neptune Regional Transmission System, LLC

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PPL Electric Utilities Corporation (cont.)

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

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 900MVA 500-230kV transformer and associated equipment	PPL (100%)
b2552.2	Reconductor the North Meshoppen - Oxbow – Lackawanna 230 kV circuit and upgrade terminal equipment (PPL portion)	PENELEC (100%)
b2574	Replace the Sunbury 230 kV ‘MONTOUR NORT’ breaker with a 63kA breaker	PPL (100%)
b2690	Reconductor two spans of the Graceton – Safe Harbor 230 kV transmission line. Includes termination point upgrades	PPL (100%)
b2691	Reconductor three spans limiting Brunner Island – Yorkana 230 kV line, add 2 breakers to Brunner Island switchyard, upgrade associated terminal equipment	PPL (100%)

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	<p>Load-Ratio Share Allocation: AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p>DFAX Allocation: PPL (100%)</p>
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%)

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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	<p>Load-Ratio Share Allocation: AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p>DFAX Allocation: PPL (100%)</p>
b2979	Replace Martins Creek 230 kV circuit breakers with 80 kA rating	PPL (100%)

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Attachment 2D PJM Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for ACE Projects

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
Required Transmission Enhancement <i>per PJM website</i>	PJM Upgrade ID <i>per PJM spreadsheet</i>	June 2018 - May 2019 Annual Revenue Requirement <i>per PJM website</i>	Responsible Customers - Schedule 12 Appendix				Estimated New Jersey EDC Zone Charges by Project				
			ACE Zone Share ¹	JCP&L Zone Share ¹	PSE&G Zone Share ¹	RE Zone Share ¹	ACE Zone Charges	JCP&L Zone Charges	PSE&G Zone Charges	RE Zone Charges	Total NJ Zones Charges
<i>per PJM Open Access Transmission Tariff</i>											
Upgrade AE portion of Delco Tap	b0265	\$ 501,690	89.87%	9.48%	0.00%	0.00%	\$450,869	\$47,560	\$0	\$0	\$498,429
Replace Monroe 230/69 kV TXfmrs	b0276	\$ 772,567	91.46%	0.00%	8.31%	0.23%	\$706,590	\$0	\$64,200	\$1,777	\$772,567
Reconductor Union - Corson 138 kV	b0211	\$ 1,317,619	65.23%	25.87%	6.35%	0.00%	\$859,483	\$340,868	\$83,669	\$0	\$1,284,020
New 500/230 Kv Sub on Salem-East Windsor (>500 kV portion)	b0210.A	\$ 2,621,699	1.66%	3.74%	6.26%	0.26%	\$43,520	\$98,052	\$164,118	\$6,816	\$312,507
New 500/230kV Sub on Salem-East Windsor (< 500kV) portion ²	b0210.B	\$ 1,869,368	65.23%	25.87%	6.35%	0.00%	\$1,219,389	\$483,606	\$118,705	\$0	\$1,821,699
Reconductor the existing Mickleton – Gloucester 230 kV circuit (AE portion)	b1398.5	\$ 469,607	0.00%	13.03%	31.99%	1.27%	\$0	\$61,190	\$150,227	\$5,964	\$217,381
Build second 230kV parallel from Mickelton to Gloucester	b1398.3.1	\$ 1,468,794	0.00%	13.03%	31.99%	1.27%	\$0	\$191,384	\$469,867	\$18,654	\$679,905
Upgrade the Mill T2 138/69 kV Transformer	b1600	\$ 1,740,287	89.21%	4.76%	5.80%	0.23%	\$1,552,510	\$82,838	\$100,937	\$4,003	\$1,740,287
			\$4,832,360	\$1,305,497	\$1,151,723	\$37,214	\$7,326,794				

Notes on calculations >>>

= (a) * (b) = (a) * (c) = (a) * (d) = (a) * (e) = (f) + (g) + (h) + (i)

	(k)	(l)	(m)	(n)	(o)	(p)
Zonal Cost Allocation for New Jersey Zones	Average Monthly Impact on Zone Customers in 18/19	2018TX Peak Load per PJM website	Rate in \$/MW-mo.	2018 Impact (7 months)	2019 Impact (5 months)	2018-2019 Impact (12 months)
PSE&G	\$ 95,976.96	9,566.9	\$ 10.03	\$ 671,839	\$ 479,885	\$ 1,151,723
JCP&L	\$ 108,791.38	5,721.0	\$ 19.02	\$ 761,540	\$ 543,957	\$ 1,305,497
ACE	\$ 402,696.70	2,540.8	\$ 158.49	\$ 2,818,877	\$ 2,013,484	\$ 4,832,360
RE	\$ 3,101.14	401.7	\$ 7.72	\$ 21,708	\$ 15,506	\$ 37,214
Total Impact on NJ Zones	\$ 610,566.18			\$ 4,273,963	\$ 3,052,831	\$ 7,326,794

Notes on calculations >>>

= (k) * (l) = (k) * 7 = (k) * 5 = (n) * (o)

Notes:

1) 2018 allocation share percentages are from PJM OATT

SCHEDULE 12 – APPENDIX

(1) Atlantic City Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0135	Build new Cumberland – Dennis 230 kV circuit which replaces existing Cumberland – Corson 138 kV	AEC (100%)
b0136	Install Dennis 230/138 kV transformer, Dennis 150 MVAR SVC and 50 MVAR capacitor	AEC (100%)
b0137	Build new Dennis – Corson 138 kV circuit	AEC (100%)
b0138	Install Cardiff 230/138 kV transformer and a 50 MVAR capacitor at Cardiff	AEC (100%)
b0139	Build new Cardiff – Lewis 138 kV circuit	AEC (100%)
b0140	Reconductor Laurel – Woodstown 69 kV	AEC (100%)
b0141	Reconductor Monroe – North Central 69 kV	AEC (100%)
b0265	Upgrade AE portion of Delco Tap – Mickleton 230 kV circuit	AEC (89.87%) / JCPL (9.48%) / Neptune* (0.65%)
b0276	Replace both Monroe 230/69 kV transformers	AEC (91.28%) / PSEG (8.29%) / RE (0.23%) / ECP** (0.20%)
b0276.1	Upgrade a strand bus at Monroe to increase the rating of transformer #2	AEC (100%)
b0277	Install a second Cumberland 230/138 kV transformer	AEC (100%)
b0281.1	Install 35 MVAR capacitor at Lake Ave 69 kV substation	AEC (100%)

Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0281.2	Install 15 MVAR capacitor at Shipbottom 69 kV substation	AEC (100%)
b0281.3	Install 8 MVAR capacitors on the AE distribution system	AEC (100%)
b0142	Reconductor Landis – Minotola 138 kV	AEC (100%)
b0143	Reconductor Beckett – Paulsboro 69 kV	AEC (100%)
b0210	Install a new 500/230kV substation in AEC area. The high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0210.1	Orchard – Cumberland – Install second 230 kV line	AEC (65.23%) / JCPL (25.87%) / Neptune * (2.55%) / PSEG (6.35%)††
b0210.2	Install a new 500/230kV substation in AEC area, the high side will be tapped on the Salem - East Windsor 500kV circuit and the low side will be tapped on the Churchtown - Cumberland 230kV circuit.	AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)††

* Neptune Regional Transmission System, LLC

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

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

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

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

Atlantic City Electric Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0211	Reconductor Union - Corson 138kV circuit		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0212	Substation upgrades at Union and Corson 138kV		AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0214	Install 50 MVAR capacitor at Cardiff 230kV substation		AEC (100%)
b0431	Monroe Upgrade New Freedom strand bus		AEC (100%)
b0576	Move the Monroe 230/69 kV to Mickleton		AEC (100%)
b0744	Upgrade a strand bus at Mill 138 kV		AEC (100%)
b0871	Install 35 MVAR capacitor at Motts Farm 69 kV		AEC (100%)
b1072	Modify the existing EMS load shedding scheme at Cedar to additionally sense the loss of both Cedar 230/69 kV transformers and shed load accordingly		AEC (100%)
b1127	Build a new Lincoln-Minitola 138 kV line		AEC (100%)
b1195.1	Upgrade the Corson sub T2 terminal		AEC (100%)
b1195.2	Upgrade the Corson sub T1 terminal		AEC (100%)

Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1244	Install 10 MVAR capacitor at Peermont 69 kV substation	AEC (100%)
b1245	Rebuild the Newport-South Millville 69 kV line	AEC (100%)
b1250	Reconductor the Monroe – Glassboro 69 kV	AEC (100%)
b1250.1	Upgrade substation equipment at Glassboro	AEC (100%)
b1280	Sherman: Upgrade 138/69 kV transformers	AEC (100%)
b1396	Replace Lewis 138 kV breaker ‘L’	AEC (100%)
b1398.5	Reconductor the existing Mickleton – Gloucester 230 kV circuit (AE portion)	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1598	Reconductor Sherman Av – Carl’s Corner 69kV circuit	AEC (100%)
b1599	Replace terminal equipments at Central North 69 kV substation	AEC (100%)
b1600	Upgrade the Mill T2 138/69 kV transformer	AEC (88.83%) / JCPL (4.74%) / HTP (0.20%) / ECP** (0.22%) / PSEG (5.78%) / RE (0.23%)
b2157	Re-build 5.3 miles of the Corson - Tuckahoe 69 kV circuit	AEC (100%)

* Neptune Regional Transmission System, LLC

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

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

SCHEDULE 12 – APPENDIX A

(1) Atlantic City Electric Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2123	Upgrade the 69 kV bus at Laurel	AEC (100%)
b2226	Upgrade the Tackahoe to Mill 69 kV circuit	AEC (100%)
b2227	50 MVAR shunt reactor at Mickleton 230 kV and relocate Mickleton #1 230 69 kV transformer	AEC (100%)
b2228	+150/-100 MVAR SVC at Cedar 230 kV	AEC (100%)
b2296	Replace the Mickleton 230kV breaker PCB U with 63kA breaker	AEC (100%)
b2297	Replace the Mickleton 230kV breaker PCB V with 63kA breaker	AEC (100%)
b2305	Rebuild and reconductor 1.2 miles of the US Silica to US Silica #1 69 kV circuit	AEC (100%)
b2306	Rebuild and reconductor 1.67 miles of the US Silica #1 to W1-089 TAP 69 kV circuit	AEC (100%)
b2351	Reconductor section A of Corson - Sea Isle - Swainton 69 kV line	AEC (100%)
b2353	Upgrade the overcurrent protective relaying at Middle T3 and T4 138/69 kV transformers	AEC (100%)
b2354	Install second 230/69 kV transformer and 230 kV circuit breaker at Churchtown substation	AEC (100%)

Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2354.1	Replace Churchtown 69kV breaker 'D'	AEC (100%)
b2476	Install new Dennis 230/69 kV transformer	AEC (100%)
b2477	Upgrade 138 kV and 69 kV breakers at Corson substation	AEC (100%)
b2478	Reconductor 2.74 miles of Sherman - Lincoln 138 kV line and associated substation upgrades	AEC (100%)
b2479	New Orchard - Cardiff 230 kV line (remove, rebuild and reconfigure existing 138 kV line) and associated substation upgrades	AEC (68.57%) / JCPL (31.43%)
b2480.1	New Upper Pittsgrove - Lewis 138 kV line and associated substation upgrades	AEC (100%)
b2480.2	Relocate Monroe to Deepwater Tap 138 kV to Landis 138 kV and associated substation upgrades	AEC (100%)
b2480.3	New Landis - Lewis 138 kV line and associated substation upgrades	AEC (100%)
b2481	New Cardiff - Lewis #2 138 kV line and associated substation upgrades	AEC (100%)
b2489	Install a 100 MVAR capacitor at BL England	AEC (100%)

Atlantic City Electric Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2538	Replace the Mickleton 230kV 'MK' breaker with 63kA breaker	AEC (100%)
b2553	Replace Middle T3 138/69 kV transformer with 225 MVA nameplate	AEC (100%)
b2723.1	Replace the Mickleton 69 kV 'PCB A' breaker with 63kA breaker	AEC (100%)
b2723.2	Replace the Mickleton 69 kV 'PCB B' breaker with 63kA breaker	AEC (100%)
b2723.3	Replace the Mickleton 69 kV 'PCB C' breaker with 63kA breaker	AEC (100%)
b2723.4	Replace the Mickleton 69 kV 'PCB Q' breaker with 63kA breaker	AEC (100%)
b2839	Replace the Sickler 69 kV 'H' breaker with 63kA breaker	AEC (100%)
b2840	Replace the Sickler 69 kV 'M' breaker with 63kA breaker	AEC (100%)
b2841	Replace the Sickler 69 kV 'A' breaker with 63kA breaker	AEC (100%)

Attachment 2E PJM Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for Delmarva Projects

(a)			(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Required Transmission Enhancement <i>per PJM website</i>	PJM Upgrade ID <i>per PJM spreadsheet</i>	June 2018-May 2019 Annual Revenue Requirement <i>per PJM website</i>	Responsible Customers - Schedule 12 Appendix				Estimated New Jersey EDC Zone Charges by Project				
			ACE Zone Share ¹	JCP&L Zone Share ¹	PSE&G Zone Share ¹	RE Zone Share ¹	ACE Zone Charges	JCP&L Zone Charges	PSE&G Zone Charges	RE Zone Charges	Total NJ Zones Charges
			<i>per PJM Open Access Transmission Tariff</i>								
Replace line trap- Keeney	b0272.1	\$ 24,299	1.66%	3.74%	6.26%	0.26%	\$403	\$909	\$1,521	\$63	\$2,896
Add two breakers- Keeney	b0751	\$ 564,319	1.66%	3.74%	6.26%	0.26%	\$9,368	\$21,106	\$35,326	\$1,467	\$67,267
Totals							\$9,771	\$22,014	\$36,847	\$1,530	\$70,163

Notes on calculations >>>

$$= (a) * (b) \quad = (a) * (c) \quad = (a) * (d) \quad = (a) * (e) \quad = (f) + (g) + (h) + (i)$$

	(k)	(l)	(m)	(n)	(o)	(p)
Zonal Cost Allocation for New Jersey Zones	Average Monthly Impact on Zone Customers in 18/19	2018TX Peak Load <i>per PJM website</i>	Rate in \$/MW-mo.	2018 Impact (7 months)	2019 Impact (5 months)	2018-2019 Impact (12 months)
PSE&G	\$ 3,070.62	9,566.9	\$ 0.32	\$ 21,494	\$ 15,353	\$ 36,847
JCP&L	\$ 1,834.53	5,721.0	\$ 0.32	\$ 12,842	\$ 9,173	\$ 22,014
ACE	\$ 814.25	2,540.8	\$ 0.32	\$ 5,700	\$ 4,071	\$ 9,771
RE	\$ 127.53	401.7	\$ 0.32	\$ 893	\$ 638	\$ 1,530
Total Impact on NJ Zones	\$ 5,846.94			\$ 40,929	\$ 29,235	\$ 70,163

Notes on calculations >>>

$$= (k) * (l) \quad = (k) * 7 \quad = (k) * 5 \quad = (n) * (o)$$

Notes:

1) 2018 allocation share percentages are from PJM OATT

SCHEDULE 12 – APPENDIX

(3) Delmarva Power & Light Company

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

Delmarva Power & Light Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0262	Reconductor 0.5 miles of Christiana – Edgemoor 138 kV		DPL (100%)
b0263	Replace 1200 Amp wavetrap at Indian River on the Indian River – Frankford 138 kV line		DPL (100%)
b0272.1	Replace line trap and disconnect switch at Keeney 500 kV substation – 5025 Line Terminal Upgrade		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0282	Install 46 MVAR capacitors on the DPL distribution system		DPL (100%)
b0291	Replace 1600A disconnect switch at Harmony 230 kV and for the Harmony – Edgemoor 230 kV circuit, increase the operating temperature of the conductor		DPL (100%)
b0295	Raise conductor temperature of North Seaford – Pine Street – Dupont Seaford		DPL (100%)

*Neptune Regional Transmission System, LLC

**East Coast Power, LLC

***Hudson Transmission Partners, LLC

Delmarva Power & Light Company (cont.)

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

Delmarva Power & Light Company (cont.)

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

Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0513	Rebuild the Ocean Bay – Maridel 69 kV line	DPL (100%)
b0527	Replace existing 12 MVAR capacitor at Bethany with a 30 MVAR capacitor	DPL (100%)
b0528	Replace existing 69/12 kV transformer at Bethany with a 138/12 kV transformer	DPL (100%)
b0529	Install an additional 8.4 MVAR capacitor at Grasonville 69 Kv	DPL (100%)
b0530	Replace existing 12 MVAR capacitor at Wye Mills with a 30 MVAR capacitor	DPL (100%)

Delmarva Power & Light Company (cont.)

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

Delmarva Power & Light Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0751	Add two additional breakers at Keeney 500 kV	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPSCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0752	Replace two circuit breakers to bring the emergency rating up to 348 MVA	DPL (100%)
b0753	Add a second Loretto 230/138 kV transformer	DPL (100%)
b0754	Rebuild 10 miles of Glasgow to Mt. Pleasant 138 kV line to bring the normal rating to 298 MVA and the emergency rating to 333 MVA	DPL (100%)
b0792	Reconfigure Cecil Sub into 230 and 138 kV ring buses, add a 230/138 kV transformer, and operate the 34.5 kV bus normally open	DPL (100%)
b0873	Build 2nd Glasgow-Mt Pleasant 138 kV line	DPL (100%)
b0874	Reconfigure Brandywine substation	DPL (100%)

*Neptune Regional Transmission System, LLC

**East Coast Power, LLC

***Hudson Transmission Partners, LLC

Delmarva Power & Light Company (cont.)

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

* Neptune Regional Transmission System, LLC

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

***Hudson Transmission Partners, LLC

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

Delmarva Power & Light Company (cont.)

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

SCHEDULE 12 – APPENDIX A

(3) Delmarva Power & Light Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2288	Build a new 138kV line from Piney Grove - Wattsville	DPL (100%)
b2395	Reconductor the Harmony - Chapel St 138 kV circuit	DPL (100%)
b2569	Replace Terminal equipment at Silverside 69 kV substation	DPL (100%)
b2633.7	Implement high speed relaying utilizing OPGW on Red Lion – Hope Creek 500 kV line	Load-Ratio Share Allocation: AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
		DFAX Allocation: AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)
b2633.10	Interconnect the new Silver Run 230 kV substation with existing Red Lion – Cartanza and Red Lion – Cedar Creek 230 kV lines	AEC (0.01%) / DPL (99.98%) / JCPL (0.01%)

*Neptune Regional Transmission System, LLC

**East Coast Power, LLC

***Hudson Transmission Partners, LLC

Delmarva Power & Light Company (cont.)

Required Transmission Enhancements Annual Revenue Requirement Responsible Customer(s)

b2695	Rebuild Worcester – Ocean Pine 69 kV ckt. 1 to 1400A capability summer emergency		DPL (100%)
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Attachment 2F PJM Schedule 12 - Transmission Enhancement Charges for June 2018 to May 2019
Calculation of costs and monthly PJM charges for PEPCO Projects

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
Required Transmission Enhancement <i>per PJM website</i>	PJM Upgrade ID <i>per PJM spreadsheet</i>	June 2018-May 2019 Annual Revenue Requirement <i>per PJM website</i>	Responsible Customers - Schedule 12 Appendix				Estimated New Jersey EDC Zone Charges by Project				
			ACE Zone Share ¹	JCP&L Zone Share ¹	PSE&G Zone Share ¹	RE Zone Share ¹	ACE Zone Charges	JCP&L Zone Charges	PSE&G Zone Charges	RE Zone Charges	Total NJ Zones Charges
			<i>per PJM Open Access Transmission Tariff</i>								
Reconductor 23035 for Dickerson-Quince	b0367.1-2	\$ 2,686,508	1.78%	2.67%	3.82%	0.00%	\$47,820	\$71,730	\$102,625	\$0	\$222,174
Replace 230 1A breaker	b0512.7	\$ 256,343	1.66%	3.74%	6.26%	0.26%	\$4,255	\$9,587	\$16,047	\$666	\$30,556
Replace 230 1B breaker	b0512.8	\$ 256,343	1.66%	3.74%	6.26%	0.26%	\$4,255	\$9,587	\$16,047	\$666	\$30,556
Replace 230 2A breaker	b0512.9	\$ 256,343	1.66%	3.74%	6.26%	0.26%	\$4,255	\$9,587	\$16,047	\$666	\$30,556
Replace 230 3A breaker	b0512.12	\$ 258,743	1.66%	3.74%	6.26%	0.26%	\$4,295	\$9,677	\$16,197	\$673	\$30,842
Ritchie-Benning 230 lines	b0526	\$ 7,684,181	0.77%	1.39%	2.10%	0.08%	\$59,168	\$106,810	\$161,368	\$6,147	\$333,493
Totals							\$124,049	\$216,979	\$328,331	\$8,820	\$678,178

Notes on calculations >>>

$$= (a) * (b) \quad = (a) * (c) \quad = (a) * (d) \quad = (a) * (e) \quad = (f) + (g) + (h) + (i)$$

	(k)	(l)	(m)	(n)	(o)	(p)
Zonal Cost Allocation for New Jersey Zones	Average Monthly Impact on Zone Customers in 18/19	2018TX Peak Load <i>per PJM website</i>	Rate in \$/MW-mo.	2018 Impact (7 months)	2019 Impact (5 months)	2018-2019 Impact (12 months)
PSE&G	\$ 27,360.91	9,566.9	\$ 2.86	\$ 191,526	\$ 136,805	\$ 328,331
JCP&L	\$ 18,081.55	5,721.0	\$ 3.16	\$ 126,571	\$ 90,408	\$ 216,979
ACE	\$ 10,337.42	2,540.8	\$ 4.07	\$ 72,362	\$ 51,687	\$ 124,049
RE	\$ 734.96	401.7	\$ 1.83	\$ 5,145	\$ 3,675	\$ 8,820
Total Impact on NJ Zones	\$ 56,514.84			\$ 395,604	\$ 282,574	\$ 678,178

Notes on calculations >>>

$$= (k) * (l) \quad = (k) * 7 \quad = (k) * 5 \quad = (n) * (o)$$

Notes:

1) 2018 allocation share percentages are from PJM OATT

SCHEDULE 12 – APPENDIX

(10) Potomac Electric Power Company

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0146	Installation of (2) new 230 kV circuit breakers at Quince Orchard substation on circuits 23028 and 23029		PEPCO (100%)
b0219	Install two new 230 kV circuits between Palmers Corner and Blue Plains		PEPCO (100%)
b0228	Upgrade Burtonsville – Sandy Springs 230 kV circuit		PEPCO (100%)
b0238.1	Modify Dickerson Station H 230 kV		PEPCO (100%)
b0251	Install 100 MVAR of 230 kV capacitors at Bells Mill		PEPCO (100%)
b0252	Install 100 MVAR of 230 kV capacitors at Bells Mill		PEPCO (100%)
b0288	Brighton Substation – add 2 nd 1000 MVA 500/230 kV transformer, 2 500 kV circuit breakers and miscellaneous bus work		BGE (19.33%) / Dominion (17%) / PEPCO (63.67%)
b0319	Add a second 1000 MVA Bruches Hill 500/230 kV transformer		PEPCO (100%)
b0366	Install a 4 th Ritchie 230/69 kV transformer		PEPCO (100%)

* Neptune Regional Transmission System, LLC

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

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

Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0367.1 Reconductor circuit “23035” for Dickerson – Quince Orchard 230 kV		AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)
b0367.2 Reconductor circuit “23033” for Dickerson – Quince Orchard 230 kV		AEC (1.78%) / BGE (26.52%) / DPL (3.25%) / JCPL (2.67%) / ME (1.16%) / Neptune* (0.25%) / PECO (4.79%) / PEPCO (52.46%) / PPL (3.23%) / PSEG (3.81%) / ECP** (0.08%)
b0375 Install 0.5% reactor at Dickerson on the Pleasant View – Dickerson 230 kV circuit		AEC (1.02%) / BGE (25.42%) / DPL (2.97%) / ME (1.72%) / PECO (3.47%) / PEPCO (65.40%)
b0467.1 Reconductor the Dickerson – Pleasant View 230 kV circuit		AEC (1.75%) / APS (19.70%) / BGE (22.13%) / DPL (3.70%) / JCPL (0.71%) / ME (2.48%) / Neptune* (0.06%) / PECO (5.54%) / PEPCO (41.86%) / PPL (2.07%)
b0478 Reconductor the four circuits from Burches Hill to Palmers Corner		APS (1.68%) / BGE (1.83%) / PEPCO (96.49%)
b0496 Replace existing 500/230 kV transformer at Brighton		APS (5.67%) / BGE (29.68%) / Dominion (10.91%) / PEPCO (53.74%)
b0499 Install third Burches Hill 500/230 kV transformer		APS (3.54%) / BGE (7.31%) / PEPCO (89.15%)

*Neptune Regional Transmission System, LLC

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

*** Hudson Transmission Partners, LLC

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

Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
0512	MAPP Project – install new 500 kV transmission from Possum Point to Calvert Cliffs and install a DC line from Calvert Cliffs to Vienna and a DC line from Calvert Cliffs to Indian River	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.7	Advance n0772 (Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

* Neptune Regional Transmission System, LLC

** East Coast Power, L.L.C

*** Hudson Transmission Partners, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.8 Advance n0773 (Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker)		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.9 Advance n0774 (Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker)		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

* Neptune Regional Transmission System, LLC

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

*** Hudson Transmission Partners, LLC

Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.10	Advance n0775 (Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.11	Advance n0776 (Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.12	Advance n0777 (Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.13	Advance n0778 (Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.14	Advance n0779 (Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.15	Advance n0780 (Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.16	Advance n0781 (Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.17	Advance n0782 (Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.18	Advance n0783 (Replace Chalk Point 230 kV breaker (5B) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.19	Advance n0784 (Replace Chalk Point 230 kV breaker (6A) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.20	Advance n0785 (Replace Chalk Point 230 kV breaker (6B) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.21	Advance n0786 (Replace Chalk Point 230 kV breaker (7B) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.22	Advance n0787 (Replace Chalk Point 230 kV breaker (8A) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.23	Advance n0788 (Replace Chalk Point 230 kV breaker (8B) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.24	Advance n0789 (Replace Chalk Point 230 kV breaker (7A) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.25	Advance n0790 (Replace Chalk Point 230 Kv breaker (1C) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.26	Advance n0791 (Replace Chalk Point 230 Kv breaker (4C) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.27	Advance n0792 (Replace Chalk Point 230 Kv breaker (5C) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)

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Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0512.28	Advance n0793 (Replace Chalk Point 230 Kv breaker (6C) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0512.29	Advance n0794 (Replace Chalk Point 230 Kv breaker (7C) with 80 kA breaker)	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0526	Build two Ritchie – Benning Station A 230 kV lines	AEC (0.77%) / BGE (16.76%) / DPL (1.22%) / JCPL (1.39%) / ME (0.59%) / Neptune* (0.13%) / PECO (2.10%) / PEPCO (74.86%) / PSEG (2.10%) / RE (0.08%)

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Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0561 Install 300 MVAR capacitor at Dickerson Station “D” 230 kV substation		AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0562 Install 500 MVAR capacitor at Brighton 230 kV substation		AEC (8.58%) / APS (1.69%) / DPL (12.24%) / JCPL (18.16%) / ME (1.55%) / Neptune* (1.77%) / PECO (21.78%) / PPL (6.40%) / ECP** (0.73%) / PSEG (26.13%) / RE (0.97%)
b0637 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0638 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0639 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0640 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0641 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0642 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0643 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0644 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0645 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0646 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0647 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0648 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)
b0649 Replace 13 Oak Grove 230 kV breakers		PEPCO (100%)

Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0701	Expand Benning 230 kV station, add a new 250 MVA 230/69 kV transformer at Benning Station 'A', new 115 kV Benning switching station	BGE (30.57%) / PEPCO (69.43%)
b0702	Add a second 50 MVAR 230 kV shunt reactor at the Benning 230 kV substation	PEPCO (100%)
b0720	Upgrade terminal equipment on both lines	PEPCO (100%)
b0721	Upgrade Oak Grove – Ritchie 23061 230 kV line	PEPCO (100%)
b0722	Upgrade Oak Grove – Ritchie 23058 230 kV line	PEPCO (100%)
b0723	Upgrade Oak Grove – Ritchie 23059 230 kV line	PEPCO (100%)
b0724	Upgrade Oak Grove – Ritchie 23060 230 kV line	PEPCO (100%)
b0730	Add slow oil circulation to the four Bells Mill Road – Bethesda 138 kV lines, add slow oil circulation to the two Buzzard Point – Southwest 138 kV lines; increasing the thermal ratings of these six lines allows for greater adjustment of the O Street phase shifters	PEPCO (100%)

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Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0731	Implement an SPS to automatically shed load on the 34 kV Bells Mill Road bus for this N-2 condition. The SPS will be in effect for 2013 and 2014 until a third Bells Mill 230/34 kV is placed in-service in 2015	PEPCO (100%)
b0746	Upgrade circuit for 3,000 amps using the ACCR	AEC (0.73%) / BGE (31.05%) / DPL (1.45%) / PECO (2.46%) / PEPCO (62.88%) / PPL (1.43%)
b0747	Upgrade terminal equipment on both lines: Quince Orchard - Bells Mill 230 kV (030) and (028)	PEPCO (100%)
b0802	Advance n0259 (Replace Dickerson Station H Circuit Breaker 412A)	PEPCO (100%)
b0803	Advance n0260 (Replace Dickerson Station H Circuit Breaker 42A)	PEPCO (100%)
b0804	Advance n0261 (Replace Dickerson Station H Circuit Breaker 42C)	PEPCO (100%)
b0805	Advance n0262 (Replace Dickerson Station H Circuit Breaker 43A)	PEPCO (100%)
b0806	Advance n0264 (Replace Dickerson Station H Circuit Breaker 44A)	PEPCO (100%)

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Potomac Electric Power Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0809 Advance n0267 (Replace Dickerson Station H Circuit Breaker 45B)		PEPCO (100%)
b0810 Advance n0270 (Replace Dickerson Station H Circuit Breaker 47A)		PEPCO (100%)
b0811 Advance n0726 (Replace Dickerson Station H Circuit Breaker SPARE)		PEPCO (100%)
b0845 Replace Chalk Point 230 kV breaker (1A) with 80 kA breaker		PEPCO (100%)
b0846 Replace Chalk Point 230 kV breaker (1B) with 80 kA breaker		PEPCO (100%)
b0847 Replace Chalk Point 230 kV breaker (2A) with 80 kA breaker		PEPCO (100%)
b0848 Replace Chalk Point 230 kV breaker (2B) with 80 kA breaker		PEPCO (100%)
b0849 Replace Chalk Point 230 kV breaker (2C) with 80 kA breaker		PEPCO (100%)
b0850 Replace Chalk Point 230 kV breaker (3A) with 80 kA breaker		PEPCO (100%)
b0851 Replace Chalk Point 230 kV breaker (3B) with 80 kA breaker		PEPCO (100%)
b0852 Replace Chalk Point 230 kV breaker (3C) with 80 kA breaker		PEPCO (100%)
b0853 Replace Chalk Point 230 kV breaker (4A) with 80 kA breaker		PEPCO (100%)
b0854 Replace Chalk Point 230 kV breaker (4B) with 80 kA breaker		PEPCO (100%)
b0855 Replace Chalk Point 230 kV breaker (5A) with 80 kA breaker		PEPCO (100%)

Potomac Electric Power Company (cont.)

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

Potomac Electric Power Company (cont.)

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

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

SCHEDULE 12 – APPENDIX A

(10) Potomac Electric Power Company

<i>Required Transmission Enhancements</i>	<i>Annual Revenue Requirement</i>	<i>Responsible Customer(s)</i>
b2279 <i>Add two 100 MVAR reactors at Dickerson Station H and two 100 MVAR reactors at Brighton 230 kV substation</i>		PEPCO (100%)
b2372 <i>Upgrade the Chalk Point - T133TAP 230 kV Ck. 1 (23063) and Ckt. 2 (23065) to 1200 MVA ACCR</i>		BGE (100%)

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

Attachment 2G - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for PECO Energy Company Transmission Projects

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
Required Transmission Enhancement <i>per PJM website</i>	PJM Upgrade ID <i>per PJM spreadsheet</i>	2018/2019 Annual Revenue Requirement <i>per PJM website</i>	Responsible Customers - Schedule 12 Appendix ACE Zone Share ¹ JCP&L Zone Share ¹ PSE&G Zone Share ¹ RE Zone Share ¹ <i>per PJM Open Access Transmission Tariff</i>				Estimated New Jersey EDC Zone Charges by Project ACE Zone Charges JCP&L Zone Charges PSE&G Zone Charges RE Zone Charges Total NJ Zones Charges				
Install a new 500 kV Center Point substation in PECO by tapping the Elroy – Whitpain 500 kV circuit.	b0269	\$ 3,834,453.99	1.66%	3.74%	6.26%	0.26%	\$63,652	\$143,409	\$240,037	\$9,970	\$457,067
Add a new 230 kV circuit between Whitpain and Heaton substations	b0269.1	\$ 4,852,276.34	8.25%	0.00%	0.00%	0.00%	\$400,313	\$0	\$0	\$0	\$400,313
Add a new 500kV brkr. at Whitpain bet. #3 transfmr. and 5029 line	b0269.6	\$ 539,744.43	1.66%	3.74%	6.26%	0.26%	\$8,960	\$20,186	\$33,788	\$1,403	\$64,338
Replace 2-500 kV circit brkrs and 2 wave traps at Elroy subs to increase rating of Elroy - Hosensack 500kV	b0171.1	\$ 726,651.74	1.66%	3.74%	6.26%	0.26%	\$12,062	\$27,177	\$45,488	\$1,889	\$86,617
Increase the rating of lines 220-39 and 220-43 (Linwood-Chichester 230kV lines) and install reactors.	b1900	\$ 3,515,277.26	0.00%	6.07%	21.01%	0.84%	\$0	\$213,377	\$738,560	\$29,528	\$981,465
Rebuild Bryn Mawr-Plymouth Meeting 138 kV line (130-35 Line)	b0727	\$ 3,379,204.64	1.25%	0.00%	0.00%	0.00%	\$42,240	\$0	\$0	\$0	\$42,240
Recndr Chichester - Saville 138 kV line and upgrade term equip	b1182	\$ 3,137,518.20	0.00%	5.12%	14.31%	0.57%	\$0	\$160,641	\$448,979	\$17,884	\$627,504
Add a second 230/138 kV trans at Chichester. Add an inductor in series with the parallel tranfmrs	b1178	\$ 1,425,743.54	0.00%	4.17%	12.18%	0.48%	\$0	\$59,454	\$173,656	\$6,844	\$239,953
Increase Bradford - Planebrook 230 kV Ckt.220-31 line rating. Replace terminal equipment	b0790	\$ 302,838.57	0.00%	17.46%	34.00%	1.32%	\$0	\$52,876	\$102,965	\$3,997	\$159,838
Reconductor the North Wales - Hartman 230 kV circuit	b0506	\$ 378,009.12	8.58%	0.00%	0.00%	0.00%	\$32,433	\$0	\$0	\$0	\$32,433
Reconductor the North Wales - Whitpain 230 kV circuit	b0505	\$ 422,393.72	8.58%	0.00%	0.00%	0.00%	\$36,241	\$0	\$0	\$0	\$36,241
Increase Bradford - Planebrook 230 kV Ckt.220-02 line rating. Replace terminal equipment	b0789	\$ 414,363.33	0.73%	17.52%	33.83%	1.32%	\$3,025	\$72,596	\$140,179	\$5,470	\$221,270
Install 161MVAR capacitor at Planebrook 230kV substation	b0206	\$ 560,607.56	14.20%	0.00%	3.47%	0.00%	\$79,606	\$0	\$19,453	\$0	\$99,059
Install 161MVAR capacitor at Newlinville 230kV substation	b0207	\$ 756,164.56	14.20%	0.00%	3.47%	0.00%	\$107,375	\$0	\$26,239	\$0	\$133,614
Install 2% series reactor at Chichester substation on the Chichester - Mickleton 230kV circuit	b0209	\$ 428,681.01	65.23%	25.87%	6.35%	0.00%	\$279,629	\$110,900	\$27,221	\$0	\$417,750
Upgrade Chichester - Delco Tap 230kV and the PECO portion of the Delco Tap - Mickleton 230kV cicuit	b0264	\$ 358,865.79	89.87%	9.48%	0.00%	0.00%	\$322,513	\$34,020	\$0	\$0	\$356,533

Attachment 2G - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for PECO Energy Company Transmission Projects

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
Required Transmission Enhancement <i>per PJM website</i>	PJM Upgrade ID <i>per PJM spreadsheet</i>	2018/2019 Annual Revenue Requirement <i>per PJM website</i>	Responsible Customers - Schedule 12 Appendix				Estimated New Jersey EDC Zone Charges by Project				
			ACE Zone Share ¹	JCP&L Zone Share ¹	PSE&G Zone Share ¹	RE Zone Share ¹	ACE Zone Charges	JCP&L Zone Charges	PSE&G Zone Charges	RE Zone Charges	Total NJ Zones Charges
<i>per PJM Open Access Transmission Tariff</i>											
Reconductor Buckingham - Pleasant Valley 230kV; same impedance as existing line; ratings of 760MVA normal/882MVA emergency	b0357	\$ 366,372.73	0.00%	37.89%	55.19%	2.37%	\$0	\$138,819	\$202,201	\$8,683	\$349,703
Reconductor Richmond-Waneeta kv and replace terminal equipment at Waneeta Substation	b1398.8	\$ 280,237.30	0.00%	13.03%	31.99%	1.27%	\$0	\$36,515	\$89,648	\$3,559	\$129,722
Install 600 MVAR cap banks at Elroy 500kv Substation	b0287	\$ 912,611.66	1.66%	3.74%	6.26%	0.26%	\$15,149	\$34,132	\$57,129	\$2,373	\$108,783
Install 161 MVAR capacitor at Heaton 230kV Substation	b0208	\$ 678,119.35	14.20%	0.00%	3.47%	0.00%	\$96,293	\$0	\$23,531	\$0	\$119,824
							\$1,499,492	\$1,104,101	\$2,369,074	\$91,600	\$5,064,267

Notes on calculations >>>

$$= (a) * (b) \quad = (a) * (c) \quad = (a) * (d) \quad = (a) * (e) \quad = (f) + (g) + (h) + (i)$$

	(k)	(l)	(m)	(n)	(o)	(n)
Zonal Cost Allocation for New Jersey Zones	Average Monthly Impact on Zone Customers in 18/19	2018TX Peak Load per PJM website	Rate in \$/MW-mo.	2018 Impact (7 months)	2019 Impact (5 months)	2018 Impact (12 months)
PSE&G	\$ 197,422.84	9,566.9	\$ 20.64	\$ 1,381,960	\$ 987,114	\$ 2,369,074
JCP&L	\$ 92,008.43	5,721.0	\$ 16.08	\$ 644,059	\$ 460,042	\$ 1,104,101
ACE	\$ 124,957.64	2,540.8	\$ 49.18	\$ 874,703	\$ 624,788	\$ 1,499,492
RE	\$ 7,633.32	401.7	\$ 19.00	\$ 53,433	\$ 38,167	\$ 91,600
Total Impact on NJ Zones	\$ 422,022.23			\$ 2,954,156	\$ 2,110,111	\$ 5,064,267

Notes on calculations >>>

$$= (k) * (l) \quad = (k) * 7 \quad = (k) * 5 \quad = (k) * 12$$

Notes:

1) 2018 allocation share percentages are from PJM OATT

SCHEDULE 12 – APPENDIX

(8) PECO Energy Company

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0171.1 Replace two 500 kV circuit breakers and two wave traps at Elroy substation to increase rating of Elroy - Hosensack 500 kV		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0180 Replace Whitpain 230kV circuit breaker #165		PECO (100%)
b0181 Replace Whitpain 230kV circuit breaker #J105		PECO (100%)
b0182 Upgrade Plymouth Meeting 230kV circuit breaker #125		PECO (100%)
b0205 Install three 28.8Mvar capacitors at Planebrook 35kV substation		PECO (100%)
b0206 Install 161Mvar capacitor at Planebrook 230kV substation		AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)

* Neptune Regional Transmission System, LLC

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

*** Hudson Transmission Partners, LLC

PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0207	Install 161Mvar capacitor at Newlinville 230kV substation	AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)
b0208	Install 161Mvar capacitor Heaton 230kV substation	AEC (14.20%) / DPL (24.39%) / PECO (57.94%) / PSEG (3.47%)
b0209	Install 2% series reactor at Chichester substation on the Chichester - Mickleton 230kV circuit	AEC (65.23%) / JCPL (25.87%) / Neptune* (2.55%) / PSEG (6.35%)
b0264	Upgrade Chichester – Delco Tap 230 kV and the PECO portion of the Delco Tap – Mickleton 230 kV circuit	AEC (89.87%) / JCPL (9.48%) / Neptune* (0.65%)
b0266	Replace two wave traps and ammeter at Peach Bottom, and two wave traps and ammeter at Newlinville 230 kV substations	PECO (100%)
b0269	Install a new 500/230 kV substation in PECO, and tap the high side on the Elroy – Whitpain 500 kV and the low side on the North Wales – Perkiomen 230 kV circuit	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)†

* Neptune Regional Transmission System, LLC

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

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

PECO Energy Company (cont.)

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

* Neptune Regional Transmission System, LLC

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

*** Hudson Transmission Partners, LLC

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

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

PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0269.6	Add a new 500 kV breaker at Whitpain between #3 transformer and 5029 line	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0269.7	Replace North Wales 230 kV breaker #105	PECO (100%)
b0280.1	Install 161 MVAR capacitor at Warrington 230 kV substation	PECO 100%
b0280.2	Install 161 MVAR capacitor at Bradford 230 kV substation	PECO 100%
b0280.3	Install 28.8 MVAR capacitor at Warrington 34 kV substation	PECO 100%
b0280.4	Install 18 MVAR capacitor at Waverly 13.8 kV substation	PECO 100%

* Neptune Regional Transmission System, LLC

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

*** Hudson Transmission Partners, LLC

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

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

PECO Energy Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b0287	Install 600 MVAR Dynamic Reactive Device in Whitpain 500 kV vicinity		AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)
b0351	Reconductor Tunnel – Grays Ferry 230 kV		PECO (100%)
b0352	Reconductor Tunnel – Parrish 230 kV		PECO (100%)
b0353.1	Install 2% reactors on both lines from Eddystone – Llanerch 138 kV		PECO (100%)
b0353.2	Install identical second 230/138 kV transformer in parallel with existing 230/138 kV transformer at Plymouth Meeting		PECO 100%
b0353.3	Replace Whitpain 230 kV breaker 135		PECO (100%)
b0353.4	Replace Whitpain 230 kV breaker 145		PECO (100%)
b0354	Eddystone – Island Road Upgrade line terminal equipment		PECO 100%

* Neptune Regional Transmission System, LLC

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

*** Hudson Transmission Partners, LLC

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

PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b0355	Reconductor Master – North Philadelphia 230 kV line	PECO 100%
b0357	Reconductor Buckingham – Pleasant Valley 230 kV	JCPL (37.17%) / Neptune* (4.46%) / PSEG (54.14%) / RE (2.32%) / ECP** (1.91%)
b0359	Reconductor North Philadelphia – Waneeta 230 kV circuit	PECO 100%
b0402.1	Replace Whitpain 230 kV breaker #245	PECO (100%)
b0402.2	Replace Whitpain 230 kV breaker #255	PECO (100%)
b0438	Spare Whitpain 500/230 kV transformer	PECO (100%)
b0443	Spare Peach Bottom 500/230 kV transformer	PECO (100%)
b0505	Reconductor the North Wales – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) / PECO (83.66%)
b0506	Reconductor the North Wales – Hartman 230 kV circuit	AEC (8.58%) / DPL (7.76%) / PECO (83.66%)
b0507	Reconductor the Jarrett – Whitpain 230 kV circuit	AEC (8.58%) / DPL (7.76%) PECO (83.66%)
b0508.1	Replace station cable at Hartman on the Warrington - Hartman 230 kV circuit	PECO (100%)
b0509	Reconductor the Jarrett – Heaton 230 kV circuit	PECO (100%)

PECO Energy Company (cont.)

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

* Neptune Regional Transmission System, LLC

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

PECO Energy Company (cont.)

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

* Neptune Regional Transmission System, LLC

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

PECO Energy Company (cont.)

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

* Neptune Regional Transmission System, LLC

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

PECO Energy Company (cont.)

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

PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b1398.8	Reconductor Richmond – Waneeta 230 kV and replace terminal equipments at Richmond and Waneeta substations	JCPL (12.82%) / NEPTUNE (1.18%) / HTP (0.79%) / PECO (51.08%) / PEPCO (0.57%) / ECP** (0.85%) / PSEG (31.46%) / RE (1.25%)
b1398.12	Replace Graysferry 230 kV breaker ‘115’	PECO (100%)
b1398.13	Upgrade Peach Bottom 500 kV breaker ‘225’	AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)†
b1398.14	Replace Whitpain 230 kV breaker ‘105’	PECO (100%)
b1590.1	Upgrade the PECO portion of the Camden – Richmond 230 kV to a six wire conductor and replace terminal equipment at Richmond.	BGE (3.05%) / ME (0.83%) / HTP (0.21%) / PECO (91.36%) / PEPCO (1.93%) / PPL (2.46%) / ECP** (0.16%)
b1591	Reconductor the underground portion of the Richmond – Waneeta 230 kV and replace terminal equipment	BGE (4.54%) / DL (0.27%) / ME (1.04%) / HTP (0.03%) / PECO (88.08%) / PEPCO (2.79%) / PPL (3.25%)

* Neptune Regional Transmission System, LLC

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

PECO Energy Company (cont.)

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

* Neptune Regional Transmission System, LLC

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

*** Hudson Transmission Partners, LLC

SCHEDULE 12 – APPENDIX A

(8) PECO Energy Company

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

PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2550	Replace terminal equipment inside Nottingham substation on the 220-05 (Nottingham – Daleville- Bradford) 230 kV line	PECO (100%)
b2551	Replace terminal equipment inside Llanerch substation on the 130-45 (Eddystone to Llanerch) 138 kV line	PECO (100%)
b2572	Replace the Peach Bottom 500 kV ‘#225’ breaker with a 63kA breaker	PECO (100%)
b2694	Increase ratings of Peach Bottom 500/230 kV transformer to 1479 MVA normal/1839 MVA emergency	AEC (4.04%) / AEP (5.87%) / APS (4.34%) / ATSI (6.25%) / BGE (1.66%) / ComEd (0.73%) / Dayton (1.08%) / DEOK (2.01%) / DL (2.29%) / Dominion (0.35%) / DPL (14.53%) / EKPC (0.40%) / JCPL (6.95%) / MetEd (3.34%) / Neptune (2.18%) / PECO (16.69%) / PENELEC (4.01%) / PPL (8.46%) / PSEG (14.37%) / RECO (0.45%)
b2752.2	Tie in new Furnace Run substation to Peach Bottom – TMI 500 kV	AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK (1.02%) / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)
b2752.3	Upgrade terminal equipment and required relay communication at Peach Bottom 500 kV: on the Beach Bottom – TMI 500 kV circuit	AEP (6.46%) / APS (8.74%) / BGE (19.74%) / ComEd (2.16%) / Dayton (0.59%) / DEOK (1.02%) / DL (0.01%) / Dominion (39.95%) / EKPC (0.45%) / PEPCO (20.88%)

PECO Energy Company (cont.)

Required Transmission Enhancements	Annual Revenue Requirement	Responsible Customer(s)
b2766.2	Upgrade substation equipment at Peach Bottom 500 kV to increase facility rating to 2826 MVA normal and 3525 MVA emergency	<p>Load-Ratio Share Allocation: AEC (1.66%) / AEP (14.16%) / APS (5.73%) / ATSI (7.88%) / BGE (4.22%) / ComEd (13.31%) / Dayton (2.11%) / DEOK (3.29%) / DL (1.75%) / DPL (2.50%) / Dominion (12.86%) / EKPC (1.87%) / JCPL (3.74%) / ME (1.90%) / NEPTUNE* (0.44%) / PECO (5.34%) / PENELEC (1.89%) / PEPCO (3.99%) / PPL (4.84%) / PSEG (6.26%) / RE (0.26%)</p> <p>DFAX Allocation: AEC (0.05%) / APS (11.40%) / BGE (22.83%) / Dayton (2.23%) / DEOK (4.28%) / DPL (0.20%) / EKPC (1.98%) / JCPL (11.06%) / NEPTUNE* (1.17%) / POSEIDON**** (0.64%) / PENELEC (0.06%) / PEPCO (19.38%) / PSEG (23.77%) / RECO (0.95%)</p>

*Neptune Regional Transmission System, LLC

****Poseidon Transmission 1, LLC

PECO Energy Company (cont.)

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

PECO Energy Company (cont.)

Required Transmission Enhancements		Annual Revenue Requirement	Responsible Customer(s)
b2863	Replace the Grays Ferry 230 kV "985" with 63kA breaker		PECO (100%)
b2864	Replace the Grays Ferry 230 kV "775" with 63kA breaker		PECO (100%)
b2923	Replace the China Tap 230 kV 'CS 15' breaker with a 63 kA breaker		PECO (100%)
b2924	Replace the Emilie 230 kV 'CS 15' breaker with 63 kA breaker		PECO (100%)
b2925	Replace the Emilie 230 kV 'CS 25' breaker with 63 kA breaker		PECO (100%)
b2926	Replace the Chichester 230 kV '215' breaker with 63 kA breaker		PECO (100%)
b2927	Replace the Plymouth Meeting 230 kV '125' breaker with 63 kA breaker		PECO (100%)
b2985	Replace the 230 kV CB #225 at Linwood Substation (PECO) with a double circuit breaker (back to back circuit breakers in one device)		PECO (100%)

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%)

Attachment 3A

Translation of 2018/2019 Schedule 12 Charges into Rates – JCP&L

Attachment 3B

Translation of 2018/2019 Schedule 12 Charges into Rates – PSE&G

Attachment 3C

Translation of 2018/2019 Schedule 12 Charges into Rates – RECO

Attachment 3A

Jersey Central Power & Light Company

Proposed TRAILCO Project Transmission Enhancement Charge (TRAILCO-TEC Surcharge) effective September 1, 2018

To reflect FERC-approved TRAILCO Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2018 - May 2019

2018/2019 Average Monthly TRAILCO-TEC Costs Allocated to JCP&L Zone	\$	528,781.40	(1)
2018 JCP&L Zone Transmission Peak Load (MW)		5721.0	
TRAILCO-Transmission Enhancement Rate (\$/MW-month)	\$	92.43	

BGS by Voltage Level	Transmission Obligation (MW)	Allocated Cost Recovery (\$) (2)	BGS Eligible Sales (kWh) (3)	Effective September 1, 2018	
				TRAILCO-TEC Surcharge (\$/kWh)	TRAILCO-TEC Surcharge w/ SUT(\$/kWh)
Secondary (excluding lighting)	4947.8	5,487,792	16,477,551,837	\$ 0.000333	\$ 0.000355
Primary	343.5	380,989	1,715,254,363	\$ 0.000222	\$ 0.000237
Transmission @ 34.5 kV	285.6	316,770	1,565,311,865	\$ 0.000202	\$ 0.000215
Transmission @ 230 kV	15.3	16,970	339,519,446	\$ 0.000050	\$ 0.000053
Total	5592.2	6,202,520	20,097,637,511		

(1) Cost Allocation of TRAILCO Project Schedule 12 Charges to JCP&L Zone for 2018/2019

(2) Based on 12 months TRAILCO Project costs from June 2018 through May 2019

(3) September 2018 through August 2019

BGS-RSCP Supplier Payment Adjustment

Line No.

1	BGS-RSCP Eligible Sales June through May @ Customer	15,493,967	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,191,398	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,694	MW
4	TRAILCO-Transmission Enhancement Costs to RSCP Suppliers	\$ 5,205,738	= Line 3 x \$92.43 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$ 0.30	= Line 4 / Line 2

Attachment 3A

Jersey Central Power & Light Company

Proposed BG&E Project Transmission Enhancement Charge (BG&E-TEC Surcharge) effective September 1, 2018

To reflect FERC-approved BG&E Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2018 - May 2019

2018/2019 Average Monthly BG&E-TEC Costs Allocated to JCP&L Zone	\$	23,649.42	(1)
2018 JCP&L Zone Transmission Peak Load (MW)		5721.0	
BG&E-Transmission Enhancement Rate (\$/MW-month)	\$	4.13	

BGS by Voltage Level	Transmission Obligation (MW)	Allocated Cost Recovery (\$) (2)	BGS Eligible Sales (kWh) (3)	Effective September 1, 2018	
				BG&E-TEC Surcharge (\$/kWh)	BG&E-TEC Surcharge w/ SUT(\$/kWh)
Secondary (excluding lighting)	4947.8	245,438	16,477,551,837	\$ 0.000015	\$ 0.000016
Primary	343.5	17,039	1,715,254,363	\$ 0.000010	\$ 0.000011
Transmission @ 34.5 kV	285.6	14,167	1,565,311,865	\$ 0.000009	\$ 0.000010
Transmission @ 230 kV	15.3	759	339,519,446	\$ 0.000002	\$ 0.000002
Total	5592.2	277,404	20,097,637,511		

(1) Cost Allocation of BG&E Project Schedule 12 Charges to JCP&L Zone for 2018/2019

(2) Based on 12 months BG&E Project costs from June 2018 through May 2019

(3) September 2018 through August 2019

BGS-RSCP Supplier Payment Adjustment

Line No.

1	BGS-RSCP Eligible Sales June through May @ Customer	15,493,967	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,191,398	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,694	MW
4	BG&E-Transmission Enhancement Costs to RSCP Suppliers	\$ 232,823	= Line 3 x \$4.13 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$ 0.01	= Line 4 / Line 2

Attachment 3A

Jersey Central Power & Light Company

Proposed PPL Project Transmission Enhancement Charge (PPL-TEC Surcharge) effective September 1, 2018

To reflect FERC-approved PPL Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2018 - May 2019

2018/2019 Average Monthly PPL-TEC Costs Allocated to JCP&L Zone	\$	293,576.76	(1)
2018 JCP&L Zone Transmission Peak Load (MW)		5721.0	
PPL-Transmission Enhancement Rate (\$/MW-month)	\$	51.32	

BGS by Voltage Level	Transmission Obligation (MW)	Allocated Cost Recovery (\$) (2)	BGS Eligible Sales (kWh) (3)	Effective September 1, 2018	
				PPL-TEC Surcharge (\$/kWh)	PPL-TEC Surcharge w/ SUT(\$/kWh)
Secondary (excluding lighting)	4947.8	3,046,794	16,477,551,837	\$ 0.000185	\$ 0.000197
Primary	343.5	211,523	1,715,254,363	\$ 0.000123	\$ 0.000131
Transmission @ 34.5 kV	285.6	175,869	1,565,311,865	\$ 0.000112	\$ 0.000119
Transmission @ 230 kV	15.3	9,422	339,519,446	\$ 0.000028	\$ 0.000030
Total	5592.2	3,443,608	20,097,637,511		

(1) Cost Allocation of PPL Project Schedule 12 Charges to JCP&L Zone for 2018/2019

(2) Based on 12 months PPL Project costs from June 2018 through May 2019

(3) September 2018 through August 2019

BGS-RSCP Supplier Payment Adjustment

Line No.

1	BGS-RSCP Eligible Sales June through May @ Customer	15,493,967	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,191,398	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,694	MW
4	PPL-Transmission Enhancement Costs to RSCP Suppliers	\$ 2,890,199	= Line 3 x \$51.32 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$ 0.17	= Line 4 / Line 2

Attachment 3A

Jersey Central Power & Light Company

Proposed ACE Project Transmission Enhancement Charge (ACE-TEC Surcharge) effective September 1, 2018

To reflect FERC-approved ACE Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2018 - May 2019

2018/2019 Average Monthly ACE-TEC Costs Allocated to JCP&L Zone	\$	108,791.38	(1)
2018 JCP&L Zone Transmission Peak Load (MW)		5721.0	
ACE-Transmission Enhancement Rate (\$/MW-month)	\$	19.02	

BGS by Voltage Level	Transmission Obligation (MW)	Allocated Cost Recovery (\$) (2)	BGS Eligible Sales (kWh) (3)	Effective September 1, 2018	
				ACE-TEC Surcharge (\$/kWh)	ACE-TEC Surcharge w/ SUT(\$/kWh)
Secondary (excluding lighting)	4947.8	1,129,057	16,477,551,837	\$ 0.000069	\$ 0.000074
Primary	343.5	78,385	1,715,254,363	\$ 0.000046	\$ 0.000049
Transmission @ 34.5 kV	285.6	65,172	1,565,311,865	\$ 0.000042	\$ 0.000045
Transmission @ 230 kV	15.3	3,491	339,519,446	\$ 0.000010	\$ 0.000011
Total	5592.2	1,276,105	20,097,637,511		

(1) Cost Allocation of ACE Project Schedule 12 Charges to JCP&L Zone for 2018/2019

(2) Based on 12 months ACE Project costs from June 2018 through May 2019

(3) September 2018 through August 2019

BGS-RSCP Supplier Payment Adjustment

Line No.

1	BGS-RSCP Eligible Sales June through May @ Customer	15,493,967	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,191,398	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,694	MW
4	ACE-Transmission Enhancement Costs to RSCP Suppliers	\$ 1,071,027	= Line 3 x \$19.02 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$ 0.06	= Line 4 / Line 2

Attachment 3A

Jersey Central Power & Light Company

Proposed Delmarva Project Transmission Enhancement Charge (Delmarva-TEC Surcharge) effective September 1, 2018

To reflect FERC-approved Delmarva Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2018 - May 2019

2018/2019 Average Monthly Delmarva-TEC Costs Allocated to JCP&L Zone	\$	1,834.53	(1)
2018 JCP&L Zone Transmission Peak Load (MW)		5721.0	
Delmarva-Transmission Enhancement Rate (\$/MW-month)	\$	0.32	

BGS by Voltage Level	Transmission Obligation (MW)	Allocated Cost Recovery (\$) (2)	BGS Eligible Sales (kWh) (3)	Effective September 1, 2018	
				Delmarva-TEC Surcharge (\$/kWh)	Delmarva-TEC Surcharge w/ SUT(\$/kWh)
Secondary (excluding lighting)	4947.8	19,039	16,477,551,837	\$ 0.000001	\$ 0.000001
Primary	343.5	1,322	1,715,254,363	\$ 0.000001	\$ 0.000001
Transmission @ 34.5 kV	285.6	1,099	1,565,311,865	\$ 0.000001	\$ 0.000001
Transmission @ 230 kV	15.3	59	339,519,446	\$ -	\$ -
Total	5592.2	21,519	20,097,637,511		

(1) Cost Allocation of Delmarva Project Schedule 12 Charges to JCP&L Zone for 2018/2019

(2) Based on 12 months Delmarva Project costs from June 2018 through May 2019

(3) September 2018 through August 2019

BGS-RSCP Supplier Payment Adjustment

Line No.

1	BGS-RSCP Eligible Sales June through May @ Customer	15,493,967	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,191,398	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,694	MW
4	Delmarva-Transmission Enhancement Costs to RSCP Suppliers	\$ 18,061	= Line 3 x \$0.32 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$ -	= Line 4 / Line 2

Attachment 3A

Jersey Central Power & Light Company

Proposed PEPCO Project Transmission Enhancement Charge (PEPCO-TEC Surcharge) effective September 1, 2018

To reflect FERC-approved PEPCO Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2018 - May 2019

2018/2019 Average Monthly PEPCO-TEC Costs Allocated to JCP&L Zone	\$	18,081.55	(1)
2018 JCP&L Zone Transmission Peak Load (MW)		5721.0	
PEPCO-Transmission Enhancement Rate (\$/MW-month)	\$	3.16	

BGS by Voltage Level	Transmission Obligation (MW)	Allocated Cost Recovery (\$) (2)	BGS Eligible Sales (kWh) (3)	Effective September 1, 2018	
				PEPCO-TEC Surcharge (\$/kWh)	PEPCO-TEC Surcharge w/ SUT(\$/kWh)
Secondary (excluding lighting)	4947.8	187,654	16,477,551,837	\$ 0.000011	\$ 0.000012
Primary	343.5	13,028	1,715,254,363	\$ 0.000008	\$ 0.000009
Transmission @ 34.5 kV	285.6	10,832	1,565,311,865	\$ 0.000007	\$ 0.000007
Transmission @ 230 kV	15.3	580	339,519,446	\$ 0.000002	\$ 0.000002
Total	5592.2	212,094	20,097,637,511		

(1) Cost Allocation of PEPCO Project Schedule 12 Charges to JCP&L Zone for 2018/2019

(2) Based on 12 months PEPCO Project costs from June 2018 through May 2019

(3) September 2018 through August 2019

BGS-RSCP Supplier Payment Adjustment

Line No.

1	BGS-RSCP Eligible Sales June through May @ Customer	15,493,967	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,191,398	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,694	MW
4	PEPCO-Transmission Enhancement Costs to RSCP Suppliers	\$ 178,009	= Line 3 x \$3.16 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$ 0.01	= Line 4 / Line 2

Attachment 3A

Jersey Central Power & Light Company

Proposed PECO Project Transmission Enhancement Charge (PECO-TEC Surcharge) effective September 1, 2018

To reflect FERC-approved PECO Project Transmission Enhancement Charge (Schedule 12 PJM OATT) effective June 2018 - May 2019

2018/2019 Average Monthly PECO-TEC Costs Allocated to JCP&L Zone	\$	92,008.43	(1)
2018 JCP&L Zone Transmission Peak Load (MW)		5721.0	
PECO-Transmission Enhancement Rate (\$/MW-month)	\$	16.08	

BGS by Voltage Level	Transmission Obligation (MW)	Allocated Cost Recovery (\$) (2)	BGS Eligible Sales (kWh) (3)	Effective September 1, 2018	
				PECO-TEC Surcharge (\$/kWh)	PECO-TEC Surcharge w/ SUT(\$/kWh)
Secondary (excluding lighting)	4947.8	954,881	16,477,551,837	\$ 0.000058	\$ 0.000062
Primary	343.5	66,292	1,715,254,363	\$ 0.000039	\$ 0.000042
Transmission @ 34.5 kV	285.6	55,118	1,565,311,865	\$ 0.000035	\$ 0.000037
Transmission @ 230 kV	15.3	2,953	339,519,446	\$ 0.000009	\$ 0.000010
Total	5592.2	1,079,244	20,097,637,511		

(1) Cost Allocation of PECO Project Schedule 12 Charges to JCP&L Zone for 2018/2019

(2) Based on 12 months PECO Project costs from June 2018 through May 2019

(3) September 2018 through August 2019

BGS-RSCP Supplier Payment Adjustment

Line No.

1	BGS-RSCP Eligible Sales June through May @ Customer	15,493,967	MWH
2	BGS-RSCP Eligible Sales June through May @ Transmission Node	17,191,398	MWH
3	BGS-RSCP Eligible Transmission Obligation	4,694	MW
4	PECO-Transmission Enhancement Costs to RSCP Suppliers	\$ 905,803	= Line 3 x \$16.08 x 12
5	Change to Supplier Payment Rates \$/MWH (rounded to 2 decimals)	\$ 0.05	= Line 4 / Line 2

Transmission Charge Adjustment - BGS-RSCP

PJM Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019

Calculation of costs and monthly PJM charges for Allegheny TrAILCo Projects

TEC Charges for June 2018 - May 2019 \$ 9,688,920.99
PSE&G Zonal Transmission Load for Effective Yr. 9,566.9
(MW)
Term (Months) 12
OATT rate \$ 84.40 /MW/month all values show w/o NJ SUT
converted to \$/MW/yr = \$ 1,012.80 /MW/yr

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Trans Obl - MW	3,750.5	21.7	71.8	0.0	0.0	2.8	0.0	0.0
Total Annual Energy - MWh	12,175,045	114,168	209,062	1,060	19	12,369	155,848	295,094
Energy Charge								
in \$/MWh	\$ 0.311991	\$ 0.192504	\$ 0.347835	\$ -	\$ -	\$ 0.229270	\$ -	\$ -
in \$/kWh - rounded to 6 places	0.000312	0.000193	0.000348	0	0	0.000229	0	0

Line #

1	Total BGS-RSCP eligible Trans Obl	6,539.3 MW		= sum of BGS-RSCP eligible Trans Obl
2	Total BGS-RSCP eligible energy @ cust	24,078,111 MWh		= sum of BGS-RSCP eligible kWh @ cust
3	Total BGS-RSCP eligible energy @ trans nodes	25,878,575 MWh	unrounded	= (2) * loss expansion factor to trans node
4	Change in OATT rate * total Trans Obl	\$ 6,623,003	unrounded	= Change in OATT rate * Total BGS-RSCP eligible Trans Obl
5	Change in Average Supplier Payment Rate	\$ 0.2559 /MWh	unrounded	= (4) / (3)
6	Change in Average Supplier Payment Rate	\$ 0.26 /MWh	rounded to 2 decimal places	= (5) rounded to 2 decimal places
7	Proposed Total Supplier Payment	\$ 6,728,430	unrounded	= (6) * (3)
8	Difference due to rounding	\$ 105,427	unrounded	= (7) - (4)

Transmission Charge Adjustment - BGS-RSCP
Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for BG&E

TEC Charges for June 2018 - May 2019 \$ 414,110.78
PSE&G Zonal Transmission Load for Effective Yr. 9,566.9
(MW)
Term (Months) 12
OATT rate \$ 3.61 /MW/month all values show w/o NJ SUT
converted to \$/MW/yr = \$ 43.32 /MW/yr

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Trans Obl - MW	3,750.5	21.7	71.8	0.0	0.0	2.8	0.0	0.0
Total Annual Energy - MWh	12,175,045	114,168	209,062	1,060	19	12,369	155,848	295,094
Energy Charge in \$/MWh	\$ 0.013345	\$ 0.008234	\$ 0.014878	\$ -	\$ -	\$ 0.009806	\$ -	\$ -
in \$/kWh - rounded to 6 places	0.000013	0.000008	0.000015	0	0	0.00001	0	0

Line #

1	Total BGS-RSCP eligible Trans Obl	6,539.3 MW		= sum of BGS-RSCP eligible Trans Obl
2	Total BGS-RSCP eligible energy @ cust	24,078,111 MWh		= sum of BGS-RSCP eligible kWh @ cust
3	Total BGS-RSCP eligible energy @ trans nodes	25,878,575 MWh	unrounded	= (2) * loss expansion factor to trans node
4	Change in OATT rate * total Trans Obl	\$ 283,282	unrounded	= Change in OATT rate * Total BGS-RSCP eligible Trans Obl
5	Change in Average Supplier Payment Rate	\$ 0.0109 /MWh	unrounded	= (4) / (3)
6	Change in Average Supplier Payment Rate	\$ 0.01 /MWh	rounded to 2 decimal places	= (5) rounded to 2 decimal places
7	Proposed Total Supplier Payment	\$ 258,786	unrounded	= (6) * (3)
8	Difference due to rounding	\$ (24,497)	unrounded	= (7) - (4)

Transmission Charge Adjustment - BGS-RSCP
Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for PPL Projects

TEC Charges for June 2018 - May 2019 \$ 5,821,226.65
PSE&G Zonal Transmission Load for Effective Yr. 9,566.9
(MW)
Term (Months) 12
OATT rate \$ 50.71 /MW/month
converted to \$/MW/yr = \$ 608.52 /MW/yr

all values show w/o NJ SUT

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Trans Obl - MW	3,750.5	21.7	71.8	0.0	0.0	2.8	0.0	0.0
Total Annual Energy - MWh	12,175,045	114,168	209,062	1,060	19	12,369	155,848	295,094
Energy charge in \$/MWh	\$ 0.187453	\$ 0.115662	\$ 0.208990	\$ -	\$ -	\$ 0.137752	\$ -	\$ -
in \$/kWh - rounded to 6 places	0.000187	0.000116	0.000209	0	0	0.000138	0	0

Line #

1	Total BGS-RSCP eligible Trans Obl	6,539.3 MW		= sum of BGS-RSCP eligible Trans Obl
2	Total BGS-RSCP eligible energy @ cust	24,078,111 MWh		= sum of BGS-RSCP eligible kWh @ cust
3	Total BGS-RSCP eligible energy @ trans nodes	25,878,575 MWh	unrounded	= (2) * loss expansion factor to trans node
4	Change in OATT rate * total Trans Obl	\$ 3,979,295	unrounded	= Change in OATT rate * Total BGS-RSCP eligible Trans Obl
5	Change in Average Supplier Payment Rate	\$ 0.1538 /MWh	unrounded	= (4) / (3)
6	Change in Average Supplier Payment Rate	\$ 0.15 /MWh	rounded to 2 decimal places	= (5) rounded to 2 decimal places
7	Proposed Total Supplier Payment	\$ 3,881,786	unrounded	= (6) * (3)
8	Difference due to rounding	\$ (97,509)	unrounded	= (7) - (4)

Transmission Charge Adjustment - BGS-RSCP
Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for ACE Projects

TEC Charges for June 2018 - May 2019 \$ 1,151,723.48
PSE&G Zonal Transmission Load for Effective Yr. 9,566.9
(MW)
Term (Months) 12
OATT rate \$ 10.03 /MW/month all values show w/o NJ SUT
converted to \$/MW/yr = \$ 120.36 /MW/yr

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Trans Obl - MW	3,750.5	21.7	71.8	0.0	0.0	2.8	0.0	0.0
Total Annual Energy - MWh	12,175,045	114,168	209,062	1,060	19	12,369	155,848	295,094
Energy charge								
in \$/MWh	\$ 0.037077	\$ 0.022877	\$ 0.041336	\$ -	\$ -	\$ 0.027246	\$ -	\$ -
in \$/kWh - rounded to 6 places	0.000037	0.000023	0.000041	0	0	0.000027	0	0

Line #

1	Total BGS-RSCP eligible Trans Obl	6,539.3 MW		= sum of BGS-RSCP eligible Trans Obl
2	Total BGS-RSCP eligible energy @ cust	24,078,111 MWh		= sum of BGS-RSCP eligible kWh @ cust
3	Total BGS-RSCP eligible energy @ trans nodes	25,878,575 MWh	unrounded	= (2) * loss expansion factor to trans node
4	Change in OATT rate * total Trans Obl	\$ 787,070	unrounded	= Change in OATT rate * Total BGS-RSCP eligible Trans Obl
5	Change in Average Supplier Payment Rate	\$ 0.0304 /MWh	unrounded	= (4) / (3)
6	Change in Average Supplier Payment Rate	\$ 0.03 /MWh	rounded to 2 decimal places	= (5) rounded to 2 decimal places
7	Proposed Total Supplier Payment	\$ 776,357	unrounded	= (6) * (3)
8	Difference due to rounding	\$ (10,713)	unrounded	= (7) - (4)

Transmission Charge Adjustment - BGS-RSCP
Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for Delmarva Projects

TEC Charges for June 2018 - May 2019 \$ 36,847.49
PSE&G Zonal Transmission Load for Effective Yr. 9,566.9
(MW)
Term (Months) 12
OATT rate \$ 0.32 /MW/month all values show w/o NJ SUT
converted to \$/MW/yr = \$ 3.84 /MW/yr

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Trans Obl - MW	3,750.5	21.7	71.8	0.0	0.0	2.8	0.0	0.0
Total Annual Energy - MWh	12,175,045	114,168	209,062	1,060	19	12,369	155,848	295,094
Energy charge in \$/MWh	\$ 0.001183	\$ 0.000730	\$ 0.001319	\$ -	\$ -	\$ 0.000869	\$ -	\$ -
in \$/kWh - rounded to 6 places	0.000001	0.000001	0.000001	0	0	0.000001	0	0

Line #

1	Total BGS-RSCP eligible Trans Obl	6,539.3 MW		= sum of BGS-RSCP eligible Trans Obl
2	Total BGS-RSCP eligible energy @ cust	24,078,111 MWh		= sum of BGS-RSCP eligible kWh @ cust
3	Total BGS-RSCP eligible energy @ trans nodes	25,878,575 MWh	unrounded	= (2) * loss expansion factor to trans node
4	Change in OATT rate * total Trans Obl	\$ 25,111	unrounded	= Change in OATT rate * Total BGS-RSCP eligible Trans Obl
5	Change in Average Supplier Payment Rate	\$ 0.0010 /MWh	unrounded	= (4) / (3)
6	Change in Average Supplier Payment Rate	\$ - /MWh	rounded to 2 decimal places	= (5) rounded to 2 decimal places
7	Proposed Total Supplier Payment	\$ -	unrounded	= (6) * (3)
8	Difference due to rounding	\$ (25,111)	unrounded	= (7) - (4)

Transmission Charge Adjustment - BGS-RSCP
Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for PEPCO Projects

TEC Charges for June 2018 - May 2019 \$ 328,330.93
PSE&G Zonal Transmission Load for Effective Yr. 9,566.9
(MW)
Term (Months) 12
OATT rate \$ 2.86 /MW/month all values show w/o NJ SUT
converted to \$/MW/yr = \$ 34.32 /MW/yr

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Trans Obl - MW	3,750.5	21.7	71.8	0.0	0.0	2.8	0.0	0.0
Total Annual Energy - MWh	12,175,045	114,168	209,062	1,060	19	12,369	155,848	295,094
Energy Charge								
in \$/MWh	\$ 0.010572	\$ 0.006523	\$ 0.011787	\$ -	\$ -	\$ 0.007769	\$ -	\$ -
in \$/kWh - rounded to 6 places	0.000011	0.000007	0.000012	0	0	0.000008	0	0

Line #

1	Total BGS-RSCP eligible Trans Obl	6,539.3 MW		= sum of BGS-RSCP eligible Trans Obl
2	Total BGS-RSCP eligible energy @ cust	24,078,111 MWh		= sum of BGS-RSCP eligible kWh @ cust
3	Total BGS-RSCP eligible energy @ trans nodes	25,878,575 MWh	unrounded	= (2) * loss expansion factor to trans node
4	Change in OATT rate * total Trans Obl	\$ 224,429	unrounded	= Change in OATT rate * Total BGS-RSCP eligible Trans Obl
5	Change in Average Supplier Payment Rate	\$ 0.0087 /MWh	unrounded	= (4) / (3)
6	Change in Average Supplier Payment Rate	\$ 0.01 /MWh	rounded to 2 decimal places	= (5) rounded to 2 decimal places
7	Proposed Total Supplier Payment	\$ 258,786	unrounded	= (6) * (3)
8	Difference due to rounding	\$ 34,357	unrounded	= (7) - (4)

Transmission Charge Adjustment - BGS-RSCP
Schedule 12 - Transmission Enhancement Charges for June 2018 - May 2019
Calculation of costs and monthly PJM charges for PECO Energy Company Transmission Projects

TEC Charges for June 2018 - May 2019 **\$2,369,074.11**
PSE&G Zonal Transmission Load for Effective Yr. (MW) **9,566.9**
Term (Months) **12**
OATT rate \$ 20.64 /MW/month all values show w/o NJ SUT
converted to \$/MW/yr = \$ 247.68 /MW/yr

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Trans Obl - MW	3,750.5	21.7	71.8	0.0	0.0	2.8	0.0	0.0
Total Annual Energy - MWh	12,175,045	114,168	209,062	1,060	19	12,369	155,848	295,094
Energy charge in \$/MWh	\$ 0.076297	\$ 0.047077	\$ 0.085063	\$ -	\$ -	\$ 0.056068	\$ -	\$ -
in \$/kWh - rounded to 6 places	\$ 0.000076	\$ 0.000047	\$ 0.000085	\$ -	\$ -	\$ 0.000056	\$ -	\$ -

Line #

1	Total BGS-RSCP eligible Trans Obl	6,539.3 MW						= sum of BGS-RSCP eligible Trans Obl
2	Total BGS-RSCP eligible energy @ cust	24,078,111 MWh						= sum of BGS-RSCP eligible kWh @ cust
3	Total BGS-RSCP eligible energy @ trans nodes	25,878,575 MWh	unrounded					= (2) * loss expansion factor to trans node
4	Change in OATT rate * total Trans Obl	\$ 1,619,654	unrounded					= Change in OATT rate * Total BGS-RSCP eligible Trans Obl
5	Change in Average Supplier Payment Rate	\$ 0.0626 /MWh	unrounded					= (4) / (3)
6	Change in Average Supplier Payment Rate	\$ 0.06 /MWh	rounded to 2 decimal places					= (5) rounded to 2 decimal places
7	Proposed Total Supplier Payment	\$ 1,552,715	unrounded					= (6) * (3)
8	Difference due to rounding	\$ (66,939)	unrounded					= (7) - (4)

Rockland Electric Company

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (TrAILCo) effective June 1, 2018

To reflect FERC-approved TrailCo Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2018 to May 2019

2018/2019 Average Monthly TrAILCo-TEC Costs Allocated to RECO	\$	33,122.33	(1)
2018 RECO Zone Transmission Peak Load (MW)		445.8	(2)
Transmission Enhancement Rate (\$/MW-month)	\$	74.30	
SUT		6.625%	

	Col. 1	Col. 2	Col.3=Col.2 x \$33,122 x 12	Col. 4	Col. 5 = Col. 3/Col. 4	Col. 6 = Col. 5 x 1.07
Rate Class	BGS-Eligible Transmission Obligation (MW)	Transmission Obligation (Pct)	Allocated Cost Recovery (1)	BGS Eligible Sales June 2018- May 2019 (kWh)	Transmission Enhancement Charge (\$/kWh)	Transmission Enhancement Charge w/ SUT (\$/kWh)
SC1	268.6	60.25%	\$ 239,457	683,341,000	\$ 0.00035	\$ 0.00037
SC2 Secondary	124.9	28.02%	\$ 111,387	525,188,000	\$ 0.00021	\$ 0.00022
SC2 Primary	15.7	3.52%	\$ 13,984	63,705,000	\$ 0.00022	\$ 0.00023
SC3	0.1	0.02%	\$ 63	271,000	\$ 0.00023	\$ 0.00025
SC4	0.0	0.00%	\$ -	6,468,000	\$ -	\$ -
SC5	3.6	0.81%	\$ 3,225	14,506,000	\$ 0.00022	\$ 0.00023
SC6	0.0	0.00%	\$ -	5,572,000	\$ -	\$ -
SC7	32.9	7.38%	\$ 29,352	223,970,000	\$ 0.00013	\$ 0.00014
Total	445.8 (2)	100.00%	\$ 397,468	1,523,021,000		

(1) Attachment 2 - Cost Allocation of TrAILCo Schedule 12 Charges to RECO Zone for June 2018 to May 2019

(2) Includes RECO's Central and Western Divisions

BGS-FP Supplier Payment AdjustmentLine No.

1	BGS-RSCP Eligible Sales Jun - May @ cust (RECO Eastern Division)	1,287,617	MWH
2	BGS-RSCP Eligible Sales Jun - May @ trans node (RECO Eastern Division)	1,198,532	MWH
3	BGS-RSCP Eligible Transmission Obligation	413	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 368,427.13	= Line 3 x \$74.3 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.31	= Line 4/Line 2

Rockland Electric Company

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (BG&E) effective June 1, 2018
To reflect FERC-approved BG&E Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2018 to May 2019

2018/2019 Average Monthly BG&E-TEC Costs Allocated to RECO	\$	1,271.82	(1)
2018 RECO Zone Transmission Peak Load (MW)		445.8	(2)
Transmission Enhancement Rate (\$/MW-month)	\$	2.85	
SUT		6.625%	

	Col. 1	Col. 2	Col.3=Col.2 x \$1,272 x 12	Col. 4	Col. 5 = Col. 3/Col. 4	Col. 6 = Col. 5 x 1.07
Rate Class	BGS-Eligible Transmission Obligation (MW)	Transmission Obligation (Pct)	Allocated Cost Recovery (1)	BGS Eligible Sales June 2018- May 2019 (kWh)	Transmission Enhancement Charge (\$/kWh)	Transmission Enhancement Charge w/ SUT (\$/kWh)
SC1	268.6	60.25%	\$ 9,195	683,341,000	\$ 0.00001	\$ 0.00001
SC2 Secondary	124.9	28.02%	\$ 4,277	525,188,000	\$ 0.00001	\$ 0.00001
SC2 Primary	15.7	3.52%	\$ 537	63,705,000	\$ 0.00001	\$ 0.00001
SC3	0.1	0.02%	\$ 2	271,000	\$ 0.00001	\$ 0.00001
SC4	0.0	0.00%	\$ -	6,468,000	\$ -	\$ -
SC5	3.6	0.81%	\$ 124	14,506,000	\$ 0.00001	\$ 0.00001
SC6	0.0	0.00%	\$ -	5,572,000	\$ -	\$ -
SC7	32.9	7.38%	\$ 1,127	223,970,000	\$ 0.00001	\$ 0.00001
Total	445.8 (2)	100.00%	\$ 15,262	1,523,021,000		

(1) Attachment 2 - Cost Allocation of BG&E Schedule 12 Charges to RECO Zone for June 2018 to May 2019

(2) Includes RECO's Central and Western Divisions

BGS-FP Supplier Payment AdjustmentLine No.

1	BGS-RSCP Eligible Sales Jun - May @ cust (RECO Eastern Division)	1,287,617	MWH
2	BGS-RSCP Eligible Sales Jun - May @ trans node (RECO Eastern Division)	1,198,532	MWH
3	BGS-RSCP Eligible Transmission Obligation	413	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 14,132.13	= Line 3 x \$2.85 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.01	= Line 4/Line 2

Rockland Electric Company

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (PPL) effective June 1, 2018

To reflect FERC-approved PPL Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2018 to May 2019

2018/2019 Average Monthly PPL-TEC Costs Allocated to RECO	\$	20,006.08	(1)
2018 RECO Zone Transmission Peak Load (MW)		445.8	(2)
Transmission Enhancement Rate (\$/MW-month)	\$	44.88	
SUT		6.625%	

	Col. 1	Col. 2	Col.3=Col.2 x \$20,006 x 12	Col. 4	Col. 5 = Col. 3/Col. 4	Col. 6 = Col. 5 x 1.07
Rate Class	BGS-Eligible Transmission Obligation (MW)	Transmission Obligation (Pct)	Allocated Cost Recovery (1)	BGS Eligible Sales June 2018- May 2019 (kWh)	Transmission Enhancement Charge (\$/kWh)	Transmission Enhancement Charge w/ SUT (\$/kWh)
SC1	268.6	60.25%	\$ 144,634	683,341,000	\$ 0.00021	\$ 0.00022
SC2 Secondary	124.9	28.02%	\$ 67,278	525,188,000	\$ 0.00013	\$ 0.00014
SC2 Primary	15.7	3.52%	\$ 8,446	63,705,000	\$ 0.00013	\$ 0.00014
SC3	0.1	0.02%	\$ 38	271,000	\$ 0.00014	\$ 0.00015
SC4	0.0	0.00%	\$ -	6,468,000	\$ -	\$ -
SC5	3.6	0.81%	\$ 1,948	14,506,000	\$ 0.00013	\$ 0.00014
SC6	0.0	0.00%	\$ -	5,572,000	\$ -	\$ -
SC7	32.9	7.38%	\$ 17,729	223,970,000	\$ 0.00008	\$ 0.00009
Total	445.8 (2)	100.00%	\$ 240,073	1,523,021,000		

(1) Attachment 2 - Cost Allocation of PPL Schedule 12 Charges to RECO Zone for June 2018 to May 2019

(2) Includes RECO's Central and Western Divisions

BGS-FP Supplier Payment AdjustmentLine No.

1	BGS-RSCP Eligible Sales Jun - May @ cust (RECO Eastern Division)	1,287,617	MWH
2	BGS-RSCP Eligible Sales Jun - May @ trans node (RECO Eastern Division)	1,198,532	MWH
3	BGS-RSCP Eligible Transmission Obligation	413	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 222,543.87	= Line 3 x \$44.88 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.19	= Line 4/Line 2

Rockland Electric Company

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (ACE) effective June 1, 2018

To reflect FERC-approved ACE Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2018 to May 2019

2018/2019 Average Monthly ACE-TEC Costs Allocated to RECO	\$	3,101	(1)
2018 RECO Zone Transmission Peak Load (MW)		445.8	(2)
Transmission Enhancement Rate (\$/MW-month)	\$	6.96	
SUT		6.625%	

	Col. 1	Col. 2	Col.3=Col.2 x \$3,101 x 12	Col. 4	Col. 5 = Col. 3/Col. 4	Col. 6 = Col. 5 x 1.07
Rate Class	BGS-Eligible Transmission Obligation (MW)	Transmission Obligation (Pct)	Allocated Cost Recovery (1)	BGS Eligible Sales June 2018- May 2019 (kWh)	Transmission Enhancement Charge (\$/kWh)	Transmission Enhancement Charge w/ SUT (\$/kWh)
SC1	268.6	60.25%	\$ 22,420	683,341,000	\$ 0.00003	\$ 0.00003
SC2 Secondary	124.9	28.02%	\$ 10,429	525,188,000	\$ 0.00002	\$ 0.00002
SC2 Primary	15.7	3.52%	\$ 1,309	63,705,000	\$ 0.00002	\$ 0.00002
SC3	0.1	0.02%	\$ 6	271,000	\$ 0.00002	\$ 0.00002
SC4	0.0	0.00%	\$ -	6,468,000	\$ -	\$ -
SC5	3.6	0.81%	\$ 302	14,506,000	\$ 0.00002	\$ 0.00002
SC6	0.0	0.00%	\$ -	5,572,000	\$ -	\$ -
SC7	32.9	7.38%	\$ 2,748	223,970,000	\$ 0.00001	\$ 0.00001
Total	445.8 (2)	100.00%	\$ 37,214	1,523,021,000		

(1) Attachment 2 - Cost Allocation of ACE Schedule 12 Charges to RECO Zone for June 2018 to May 2019

(2) Includes RECO's Central and Western Divisions

BGS-FP Supplier Payment AdjustmentLine No.

1	BGS-RSCP Eligible Sales Jun - May @ cust (RECO Eastern Division)	1,287,617	MWH
2	BGS-RSCP Eligible Sales Jun - May @ trans node (RECO Eastern Division)	1,198,532	MWH
3	BGS-RSCP Eligible Transmission Obligation	413	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 34,512.15	= Line 3 x \$6.96 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.03	= Line 4/Line 2

Rockland Electric Company

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (Delmarva) effective June 1, 2018
To reflect FERC-approved Delmarva Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2018 to May 2019

2018/2019 Average Monthly Delmarva-TEC Costs Allocated to RECO	\$	127.53	(1)
2018 RECO Zone Transmission Peak Load (MW)		445.8	(2)
Transmission Enhancement Rate (\$/MW-month)	\$	0.29	
SUT		6.625%	

	Col. 1	Col. 2	Col.3=Col.2 x \$128 x 12	Col. 4	Col. 5 = Col. 3/Col. 4	Col. 6 = Col. 5 x 1.07
Rate Class	BGS-Eligible Transmission Obligation (MW)	Transmission Obligation (Pct)	Allocated Cost Recovery (1)	BGS Eligible Sales June 2018- May 2019 (kWh)	Transmission Enhancement Charge (\$/kWh)	Transmission Enhancement Charge w/ SUT (\$/kWh)
SC1	268.6	60.25%	\$ 922	683,341,000	\$ -	\$ -
SC2 Secondary	124.9	28.02%	\$ 429	525,188,000	\$ -	\$ -
SC2 Primary	15.7	3.52%	\$ 54	63,705,000	\$ -	\$ -
SC3	0.1	0.02%	\$ -	271,000	\$ -	\$ -
SC4	0.0	0.00%	\$ -	6,468,000	\$ -	\$ -
SC5	3.6	0.81%	\$ 12	14,506,000	\$ -	\$ -
SC6	0.0	0.00%	\$ -	5,572,000	\$ -	\$ -
SC7	32.9	7.38%	\$ 113	223,970,000	\$ -	\$ -
Total	445.8 (2)	100.00%	\$ 1,530	1,523,021,000		

(1) Attachment 2 - Cost Allocation of Delmarva Schedule 12 Charges to RECO Zone for June 2018 to May 2019

(2) Includes RECO's Central and Western Divisions

BGS-FP Supplier Payment AdjustmentLine No.

1	BGS-RSCP Eligible Sales Jun - May @ cust (RECO Eastern Division)	1,287,617	MWH
2	BGS-RSCP Eligible Sales Jun - May @ trans node (RECO Eastern Division)	1,198,532	MWH
3	BGS-RSCP Eligible Transmission Obligation	413	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 1,438.01	= Line 3 x \$0.29 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ -	= Line 4/Line 2

Rockland Electric Company

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (PEPCO) effective June 1, 2018
To reflect FERC-approved PEPCO Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2018 to May 2019

2018/2019 Average Monthly PEPCO-TEC Costs Allocated to RECO	\$	734.96	(1)
2018 RECO Zone Transmission Peak Load (MW)		445.8	(2)
Transmission Enhancement Rate (\$/MW-month)	\$	1.65	
SUT		6.625%	

	Col. 1	Col. 2	Col.3=Col.2 x \$735 x 12	Col. 4	Col. 5 = Col. 3/Col. 4	Col. 6 = Col. 5 x 1.07
Rate Class	BGS-Eligible Transmission Obligation (MW)	Transmission Obligation (Pct)	Allocated Cost Recovery (1)	BGS Eligible Sales June 2018- May 2019 (kWh)	Transmission Enhancement Charge (\$/kWh)	Transmission Enhancement Charge w/ SUT (\$/kWh)
SC1	268.6	60.25%	\$ 5,313	683,341,000	\$ 0.00001	\$ 0.00001
SC2 Secondary	124.9	28.02%	\$ 2,472	525,188,000	\$ -	\$ -
SC2 Primary	15.7	3.52%	\$ 310	63,705,000	\$ -	\$ -
SC3	0.1	0.02%	\$ 1	271,000	\$ -	\$ -
SC4	0.0	0.00%	\$ -	6,468,000	\$ -	\$ -
SC5	3.6	0.81%	\$ 72	14,506,000	\$ -	\$ -
SC6	0.0	0.00%	\$ -	5,572,000	\$ -	\$ -
SC7	32.9	7.38%	\$ 651	223,970,000	\$ -	\$ -
Total	445.8 (2)	100.00%	\$ 8,819	1,523,021,000		

(1) Attachment 2 - Cost Allocation of PEPCO Schedule 12 Charges to RECO Zone for June 2018 to May 2019

(2) Includes RECO's Central and Western Divisions

BGS-FP Supplier Payment Adjustment

Line No.

1	BGS-RSCP Eligible Sales Jun - May @ cust (RECO Eastern Division)	1,287,617	MWH
2	BGS-RSCP Eligible Sales Jun - May @ trans node (RECO Eastern Division)	1,198,532	MWH
3	BGS-RSCP Eligible Transmission Obligation	413	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 8,181.76	= Line 3 x \$1.65 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.01	= Line 4/Line 2

Rockland Electric Company

Calculation of Transmission Surcharges reflecting changes in Transmission Enhancement Charges (PECO) effective June 1, 2018
To reflect FERC-approved PECO Project Schedule 12 Charges (Schedule 12 PJM OATT) for the period June 2018 to May 2019

2018/2019 Average Monthly PECO-TEC Costs Allocated to RECO	\$	7,633.32	(1)
2018 RECO Zone Transmission Peak Load (MW)		445.8	(2)
Transmission Enhancement Rate (\$/MW-month)	\$	17.12	
SUT		6.625%	

	Col. 1	Col. 2	Col.3=Col.2 x \$7,633 x 12	Col. 4	Col. 5 = Col. 3/Col. 4	Col. 6 = Col. 5 x 1.07
Rate Class	BGS-Eligible Transmission Obligation (MW)	Transmission Obligation (Pct)	Allocated Cost Recovery (1)	BGS Eligible Sales June 2018- May 2019 (kWh)	Transmission Enhancement Charge (\$/kWh)	Transmission Enhancement Charge w/ SUT (\$/kWh)
SC1	268.6	60.25%	\$ 55,185	683,341,000	\$ 0.00008	\$ 0.00009
SC2 Secondary	124.9	28.02%	\$ 25,670	525,188,000	\$ 0.00005	\$ 0.00005
SC2 Primary	15.7	3.52%	\$ 3,223	63,705,000	\$ 0.00005	\$ 0.00005
SC3	0.1	0.02%	\$ 14	271,000	\$ 0.00005	\$ 0.00005
SC4	0.0	0.00%	\$ -	6,468,000	\$ -	\$ -
SC5	3.6	0.81%	\$ 743	14,506,000	\$ 0.00005	\$ 0.00005
SC6	0.0	0.00%	\$ -	5,572,000	\$ -	\$ -
SC7	32.9	7.38%	\$ 6,764	223,970,000	\$ 0.00003	\$ 0.00003
Total	445.8 (2)	100.00%	\$ 91,599	1,523,021,000		

(1) Attachment 2 - Cost Allocation of PECO Schedule 12 Charges to RECO Zone for June 2018 to May 2019

(2) Includes RECO's Central and Western Divisions

BGS-FP Supplier Payment AdjustmentLine No.

1	BGS-RSCP Eligible Sales Jun - May @ cust (RECO Eastern Division)	1,287,617	MWH
2	BGS-RSCP Eligible Sales Jun - May @ trans node (RECO Eastern Division)	1,198,532	MWH
3	BGS-RSCP Eligible Transmission Obligation	413	MW
4	Transmission Enhancement Costs to RSCP Suppliers	\$ 84,891.96	= Line 3 x \$17.12 * 12
5	Change in Supplier Payment Rate \$/MWH (rounded to 2 decimals)	\$ 0.07	= Line 4/Line 2